Recommendations for an Assessment Framework

For the 2009 National Assessment of Educational Progress in Reading

DRAFT FRAMEWORK FOR PUBLIC REVIEW

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EXECUTIVE SUMMARY

As the ongoing national indicator of what American students know and can do, the National Assessment of Educational Progress (NAEP) in reading regularly collects achievement information on representative samples of students in grades 4, 8, and 12. Through the "Nation's Report Card," the NAEP Reading Assessment reports how well students perform in reading various texts and responding to those texts by answering multiple-choice and constructed-response questions. The information NAEP provides about student achievement helps the public, educators, and policymakers understand strengths and weaknesses in student performance and make informed decisions about education.

The 2009 NAEP Reading Assessment will objectively measure national, regional, and subgroup trends in reading achievement but will not report individual student or school performance. The public will have access to performance results and released questions via NAEP reports and websites.

The recommended NAEP 2009 Reading Framework is consistent with the *No Child Left Behind* (NCLB) legislation of 2001. In accordance with NCLB, the NAEP Reading Assessment will be administered every two years at grades 4 and 8, and the resulting data will be widely reported in a timely fashion. In addition, NAEP will assess and report grade 12 reading results every four years. The assessment will measure students' reading comprehension and their ability to apply vocabulary knowledge to assist them in comprehending what they read.

The National Assessment Governing Board (NAGB)—the policy-making body for NAEP—has stated that the NAEP assessment will measure reading comprehension by asking students to read passages written in English and to answer questions about what they have read. The Framework "shall not endorse or advocate a particular pedagogical approach, …but shall focus on important, measurable indicators of student achievement".[1] Although broad implications for instruction may be inferred from the assessment, NAEP does not specify how reading should be taught, nor does it prescribe a particular curricular approach to teaching reading.

The NAEP 2009 Reading Framework recommendations result from the work of many individuals and organizations involved in reading and reading education, including researchers, policymakers, educators, and other members of the public. Their work was guided by scientifically based literacy research that conceptualizes reading as a dynamic cognitive process, as reflected in the following definition of reading:

Reading is an active and complex process that involves

- understanding written text;
- developing and interpreting meaning; and
- using meaning as appropriate to type of text, purpose, and situation.

[1]National Assessment Governing Board. (2002, May). *National Assessment Governing Board Policy on Framework Development*. Washington, DC: Author.

Text Types

The NAEP 2009 Reading Framework recognizes that reading behaviors such as recognizing and using features of text, making sense of sentences and paragraphs, and comprehending vocabulary occur regardless of text type. However, other reading behaviors vary with the type of text encountered by a reader. Thus, the NAEP 2009 Reading Framework recommends that two types of texts be included on the assessment: literary texts, which include fiction, literary nonfiction and poetry, and informational texts, which include exposition, argumentation and persuasive text, and document and procedural materials.

Meaning Vocabulary Assessment

The NAEP 2009 Reading Framework recommends a more systematic approach to vocabulary assessment than previous frameworks. Vocabulary assessment will occur in the context of a passage, that is, vocabulary items will function both as a measure of passage comprehension and as a test of readers' specific knowledge of the word's meaning as intended by the passage author. A sufficient number of vocabulary items at each grade will provide reliable and valid information about students' vocabulary knowledge.

Item Design

The NAEP 2009 Reading Framework recommends the following cognitive targets or behaviors and skills for items from both literary and information texts: Locate/Recall, Integrate/Interpret, and Critique/Evaluate. These cognitive targets illustrate the complex nature of the reading process, while the corresponding behaviors highlight the different behaviors elicited by different text types. To measure these cognitive skills, students will respond to both multiple-choice and constructed-response items, with varying distributions by grade level. Students in grade 4 will spend approximately half of the assessment time responding to multiple-choice items and half responding to constructed-response items. Students in grades 8 and 12 will spend a greater amount of time on constructed-response items.

Reporting Results

Results of the NAEP Reading Assessment administrations are reported in two ways: 1) as average scores for groups of students on the NAEP 0–500 scale and 2) as percentages of students who attain each of the three achievement levels, Basic, Proficient, and Advanced, according to the definitions adopted by NAGB. NAEP scores are always reported at the aggregate level; scores are not available for individual schools or students.

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EXTERNAL REVIEW PANEL

To obtain an independent review of the draft NAEP 2009 Reading Framework, the National Assessment Governing Board commissioned a panel of prominent reading researchers and scholars to examine the draft document. After a three-month review period, the panel reported to the Governing Board on issues such as whether the Framework is supported by scientific research; whether the document reflects what students should know and be able to do in grades 4, 8, and 12; the appropriateness of proposed reading materials; and the clarity and organization of the draft Framework. Members of the Reading External Panel are listed below.

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CHAPTER 1

OVERVIEW OF THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS AND ITS DEFINITION OF READING

The National Assessment of Educational Progress (NAEP) has since 1969 been an ongoing national indicator of what American students know and can do in major academic subjects, including reading in English. NAEP reading assessments have been administered on a regular schedule to students in grades 4, 8, and 12. Under the *No Child Left Behind Act of 2001,* NAEP will assess reading in grades 4 and 8 every two years and reading in grade 12 every four years.

OVERVIEW OF NAEP

The National Assessment Governing Board (NAGB)—the policy-making body for NAEP—has defined several parameters for the reading assessment. First, the NAEP assessment will measure reading comprehension in English. On the assessment, students will be asked to read passages written in English and to answer questions about what they have read. Second, because this is an assessment of reading comprehension and not listening comprehension, NAEP does not allow passages to be read aloud to students as a test accommodation. Third, under NAGB policy, the Framework "shall not endorse or advocate a particular pedagogical approach, …but shall focus on important, measurable indicators of student achievement."[2] Although broad implications for instruction may be inferred from the assessment, NAEP does not specify how reading should be taught, nor does it prescribe a particular curricular approach to teaching reading.

Reading passages are selected to be interesting to students nationwide, to represent high-quality literary and informational material, and to be free from bias. Students respond to both multiple-choice and constructed-response items. In total, the NAEP assessments at grades 4, 8, and 12 are extensive enough to ensure that results can be reported validly, but no single student participates in the entire assessment. Instead, each student reads approximately two passages and responds to questions about what he or she has read.

NAEP assessments are administered to a random sample of students who are representative of every type and size of community nationwide. As discussed in Chapter 3, NAEP results are reported for groups of students; no data are reported for individual students. Since 1992, states have been able to obtain state-level data on students' reading achievement. In 2002 and 2003, large urban school districts were able to obtain data about their students' reading achievement. Results are reported in documents such as the *NAEP Reading Highlights* and the *NAEP Reading Report Cards* that are issued following each administration of the reading assessment; through special, focused reports; and through electronic means.

[2]National Assessment Governing Board. (May, 2002). *National Assessment Governing Board Policy on Framework Development*. Washington, DC: Author.

Data are also collected that allow comparison of students' reading achievement over long periods of time, in a separate Long-Term Trend NAEP. These assessments—at the national level only—have been administered in the same form since 1971 and provide the only available measure of extended long-term trends in reading achievement.

Purpose of NAEP Under the NCLB Legislation

The NAEP 2009 Reading Framework is consistent with current *No Child Left Behind* (NCLB) legislation. NCLB specifies that the NAEP reading assessment offer "a fair and accurate measurement of student academic achievement and reporting trends in such achievement" (NCLB, Sec. 411, b1); thus, the NAEP reading data will measure national, regional, and subgroup trends in reading achievement but will not target the performance of individual students or schools. In further accordance with NCLB, the NAEP reading assessment will be administered every two years at grades 4 and 8, and the resulting data will be widely reported in a timely fashion. Finally, NCLB specifies that although the public will have full access to NAEP results and released test questions, NAEP will not seek to influence the curriculum or assessments of any state.

The Definition of Reading for the 2009 NAEP Reading Assessment

The recommended 2009 NAEP Reading Assessment is guided by a definition of reading that reflects scientific research, draws on multiple sources, and conceptualizes reading as a dynamic cognitive process. The definition for the 2009 NAEP Reading Assessment states:

> Reading is an active and complex process that involves
>
> - understanding written text;
> - developing and interpreting meaning; and
> - using meaning as appropriate to type of text, purpose, and situation.
>
> Terms used in the definition can be further explained as follows:
>
> **Understanding written text**—Readers draw on their most fundamental skills for recognizing letter-sound correspondences; decoding printed words; and accessing vocabulary knowledge. Readers attend to information in a text by locating and recalling information, and making straightforward inferences needed for literal comprehension of the text.
>
> **Developing and interpreting meaning**—Readers use more complex inferencing skills to comprehend information implied by a text. They integrate the sense they have made of the text with their knowledge of other texts and of outside experiences. At times, they revise their sense of the text as they encounter additional information or ideas.
>
> **Using meaning**—Readers draw on the ideas and information they have acquired from text to meet a particular purpose or situational need. The "use" of text may be as simple as knowing the time when a train will leave a particular station or may involve more complex behaviors such as interpreting a character's motivation or evaluating the quality of evidence presented in an argument.

Text—As used in the assessment, the term reflects the breadth of components in typical reading materials. Thus, text on the assessment will include literary or informational passages and may contain noncontinuous print material such as charts. Texts selected for inclusion on the assessment represent practical, academic, and other contexts and are drawn from grade-appropriate sources spanning the content areas.

Factors That Influence Reading Performance

Factors related to the text being read and to readers' backgrounds and experiences influence reading performance. For example, understanding the vocabulary, concepts, and structural elements of the text contributes to the readers' successful comprehension. Comprehension is also affected by readers' background knowledge and by the context of the reading experience. The background knowledge that students bring to the NAEP Reading Assessment will differ widely. To accommodate these differences, passages will span diverse areas and topics and will be as engaging as possible to the full range of students at grades 4, 8, and 12.

The purpose for reading also influences performance. In the case of the 2009 NAEP Reading Assessment, purpose is determined by the assessment context; thus, the influence of purpose on readers' comprehension is somewhat limited. For this reason, the definition of reading presented earlier should be considered as a guide for the NAEP Reading Assessment, not as an inclusive definition of reading. The definition pertains to how NAEP defines reading for the purpose of this assessment at grades 4, 8, and 12. It does not address the issue of how students should be taught to read.

Text comprehension is influenced by readers' ability to apply the essential components of reading: phonemic awareness, phonics knowledge, fluency, and understanding of word meanings or vocabulary. Without these foundational skills, comprehension will not occur. By grade 4, when the NAEP reading assessment is first administered, students should have a well-developed understanding of how sounds are represented alphabetically and should have had sufficient practice in reading to achieve fluency with different kinds of texts.[3] For these reasons, NAEP has traditionally assessed students' reading comprehension, not foundational skills related to alphabetic knowledge.[4] As discussed further in Chapter 2, the links between vocabulary knowledge and comprehension are strong; students who know the meanings of many words and who also can use the context of what they read to figure out the meanings of unfamiliar words are better comprehenders than those who lack these attributes.[5] In the 2009 NAEP Reading Assessment, vocabulary will be assessed systematically, through carefully developed items that measure students' ability to derive the meanings of words within the context of the passages they read.

[3]National Research Council. (1998). *Preventing reading difficulties in young children.* Washington, DC: Author.

[4]NAEP has investigated the relationship between oral fluency and reading comprehension in two special studies, in 1992 and 2002.

[5]National Reading Panel. (2000). *Teaching children to read: An evidence–based assessment of the scientific research literature on reading and its implications for reading instruction.* Washington, DC: National Institute of Child Health and Human Development.

The Nature of Reading Behaviors

Reading is an active and complex process that involves multiple different behaviors. Readers often begin by forming an overview of text and then search for the information to which they must pay particular attention. Following this initial overview, readers progress with different levels of interaction with text, including interpreting and evaluating what they read. By drawing on previous reading experiences and prior knowledge, they form hypotheses about what the text will communicate and revise their initial ideas and their knowledge base as their reading continues. Readers continuously acquire new understanding and integrate this into their ongoing process of building comprehension. Good readers monitor their understanding of text, recognize when text is not making sense, and employ a range of strategies to enhance their comprehension. Good readers also evaluate the qualities of text, and these evaluations can affect whether a text is remembered or has an impact on readers' knowledge, attitudes, or behaviors.[6] Depending on the situation and purpose for reading, good readers can use the ideas and information they acquire from text, for example, to expand their thinking about a topic, to perform a specific task, or to draw conclusions or make generalizations about what they have read.

Definitions of Reading That Have Informed the Framework Development

The definition of reading for the 2009 NAEP Reading Assessment is derived from several sources and is grounded in scientific research on reading. Among the sources are the Federal *No Child Left Behind* legislation, several important research reports on reading, and the definitions of reading that guide the development of international reading tests. Each source has contributed important ideas to the definition used for the NAEP Reading Assessment.

The ***No Child Left Behind*** legislation posits that reading has five essential components: phonemic awareness, knowledge of phonics, reading fluency, vocabulary, and comprehension. The NAEP Reading Assessment, which is first administered at grade 4, measures students' comprehension. To demonstrate comprehension of what they read, students draw on their phonemic awareness and knowledge of phonics. Their ability to read the reading passages and test questions with minimal effort reflects their fluency. Students draw on their vocabulary knowledge throughout the assessment, and specific items ask about carefully selected target words in each reading passage.

The **National Reading Panel (NRP)**,[7] a congressionally mandated commission, conducted an extensive, evidence-based study of research literature on reading acquisition, reading growth, and other relevant topics. The NRP report was an important foundation for the *No Child Left Behind* legislation, highlighting the importance of alphabetics (phonemic awareness and phonics), fluency, and vocabulary/comprehension.

Three important definitions of reading influenced the development of the definition of reading for the 2009 NAEP Reading Assessment. The first comes from ***Reading for Understanding:***

[6]Pressley, M., & Afflerbach, P. (1995). *Verbal protocol analysis: The nature of constructively responsive reading*. Hillsdale, NJ: Erlbaum; Ruddell, R.B., & Unrau, N.J. (1994). Reading as a meaning-construction process: The reader, the text, and the teacher. In R.B. Ruddell, M.R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (4th edition., pp. 996-1056). Newark, DE: International Reading Association.

[7]National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel*. Washington, DC: Author.

Toward an R&D Program in Reading Comprehension,[8] frequently referred to as the ***RAND Report.*** This report was prepared by the Rand Reading Study Group, under the auspices of the Office of Educational Research and Improvement of the U.S. Department of Education. Guiding the work of the Study Group was the following definition of reading:

> *Reading comprehension* [is] the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. It consists of three elements: the reader, the text, and the activity or purpose for reading. (p. 11)

The second important definition was the foundation for item development for the **Progress in International Reading Literacy Study (PIRLS)**.[9] PIRLS was first administered to nine-year-old students in 35 countries in 2001. PIRLS defines reading literacy as

> the ability to understand and use those written forms required by society and/or valued by the individual. Young readers can construct meaning from a variety of texts. They read to learn, to participate in communities of readers, and for enjoyment. (p. 3)

The **Programme for Student Assessment (PISA)**[10] represents an international collaborative effort to assess what 15-year-old students know and can do in reading, mathematics, and science. PISA defines reading literacy as

> understanding, using, and reflecting on written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society. (p. 18)

The *RAND Report,* PIRLS, and PISA definitions offer support to the definition for reading advocated in the 2009 NAEP Reading Framework. All three stress that reading is an active, complex, and multidimensional process that is undertaken for many different purposes.

OVERVIEW OF THE NAEP READING ASSESSMENT

The National Assessment of Educational Progress in reading will include two distinct types of text at grades 4, 8, and 12. Doing so will allow the development of items that measure students' comprehension of the different kinds of text they encounter in their school and out-of-school reading experiences. The reasons for including literary and informational text are presented next, followed by explanations of the characteristics of each text type that will be included on the assessment. The 2009 NAEP Reading Assessment will also include items that assess students' ability to apply their knowledge of vocabulary as an aid in their comprehension process.

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[8]RAND Reading Study Group. (2002). *Reading for understanding: Toward an R&D program in reading comprehension.* Santa Monica, CA: RAND.

[9]Campbell, J.R., Kelly, D.L., Mullis, I.V.S., Martin, M.O., & Sainsbury, M. (2001, March). *Framework and specifications for PIRLS Assessment 2001.* Chestnut Hill, MA: PIRLS International Study Center, Lynch School of Education, Boston College.

[10]Organisation for Economic Co-operation and Development. (2000). *Measuring student knowledge and skill: The PISA 2000 assessment of reading, mathematical and scientific literacy.* Paris: Author.

Commonalities in Reading Behavior Across Text Types

The Framework recognizes that even though there are substantial differences in reading behaviors for different text types, there are also great similarities. Regardless of the type of text, the reader must access the words in the text, recognize and use the structure of the text, make sense of sentences and paragraphs, and comprehend what has been read. Equally, vocabulary is a critical element in comprehending any kind of text.

Text Characteristics: Literary and Informational Texts

Research on the nature of text and on reading processes has suggested that the characteristics of literary and informational text differ dramatically. For the most part, the research literature suggests that there are different aspects to be studied in different types of text.[11] Additionally, the PIRLS report shows that students in the United States scored higher on the Literary Subscale (at 550) than on the Informational Subscale (at 533), further substantiating the difference in the strategies needed for the two text types.[12] Drawing on this extensive research base, the 2009 Reading Framework includes two major types of text: literary and informational. Well-crafted nonfiction work with strong literary characteristics will be classified as literary text, and documents such as tables, graphs, or charts will be included in the informational category.

Literary and informational texts for the NAEP Reading Assessment are separated for two primary reasons: the structural differences that mark the text types and the purposes for which different texts are read.

Structural Differences in Text

Literary and informational texts are marked by distinct structural characteristics that readers rely on as they seek to understand what they read.[13] For example, research on literary text[14] has pointed out that stories and novels are characterized by a coherent text structure known as "story grammars." Research on informational or expository text[15] has indicated that such texts possess well-defined organizational patterns, such as comparison and contrast, designed to help readers organize their emerging sense of what the text is communicating. These structures are distinct from the narrative story grammars. The nature of texts affects comprehension, and different text types must be

[11]Pearson, P.D., & Camperell, K. (1994). Comprehension of text structures. In R.B. Ruddell, M.R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes at reading* (4th ed., pp. 448–468). Newark, DE: International Reading Association; Pressley, M. (2000). What should comprehension instruction be the instruction of? In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. III, pp. 545–586). Mahwah, NJ: Erlbaum.

[12]Organisation for Economic Co-operation and Development, *Op. cit.*, p. 5.

[13]Goldman, S., & Rakestraw, J. (2000). Structural aspects of constructing meaning from text. In R. Barr, M. Kamil, P. Mosenthal, & P.D. Pearson (Eds.), *Handbook of reading research* (Vol. III, pp. 311–335). New York: Longman.

[14]Graesser, A., Golding, J.M., & Long, D.L. (1991). Narrative representation and comprehension. In R. Barr, M.L. Kamil, P.B. Mosenthal, & P.D. Pearson (Eds.), *Handbook of reading research* (Vol. II, pp. 171–205). White Plains, NY: Longman.

[15]Kobayashi, M. (2002). Method effects on reading comprehension test performance: Text organization and response format. *Language Testing, 19,* 193–200; Weaver, C.A., III, & Kintsch, W. (1991). Expository text. In R. Barr, M.L. Kamil, P.B. Mosenthal, & P.D. Pearson (Eds.), *Handbook of reading research* (Vol. II, pp. 230–245). White Plains, NY: Longman.

read in different ways.[16] Good readers adjust their reading behaviors to accommodate the kinds of text they are reading.

Purposes for Reading

A second reason for separating text types is that readers often read literary and informational texts for different purposes. The definition of reading that guides the NAEP Reading Assessment specifically states that readers read for different purposes, which are often reflected in their selection of literary or informational texts. The purpose set for reading a text often determines how that text is read. Literary texts, such as stories, drama, essays, or poetry, are frequently read for pleasure or for new perspectives on time, place, human nature, or feelings; they are often read from beginning to end. The ultimate utility of informational text is determined by how well it conveys information or ideas. These differences in reading purpose are, of course, permeable. For example, well-crafted informational text is often read for appreciation and enjoyment, in addition for obtaining the information that the text can provide.

> The fundamental role of information books is to provide the child with a body of information that as it answers old questions will stimulate him [or her] to ask new ones. It is in this perpetual cycle of questions and answers, in which vague imaginings become knowledge and truth, that a child's precious gift of wonder and desire to know becomes the foundation upon which significant learning experiences are built.[17]

Features That Distinguish Text Types

Several features distinguish literary and informational texts. Skilled writers understand that different kinds of text need different structural patterns, and good readers are able to use the specific text features as aids in comprehension.

Literary Texts

The 2009 NAEP Reading Assessment will present reading passages (i.e., stimulus material) drawn from three categories of literary text:

- Fiction
- Literary nonfiction, such as narrative essays, speeches, and autobiographies or biographies
- Poetry

The structural patterns of fiction—short stories and novels—have been studied extensively. Although many researchers have suggested different ways to name the elements of a story,[18] there is general agreement that a story consists of the following components: the setting or settings; a simple or complex plot consisting of a series of episodes and delineating a problem to be solved; the problem or conflict, which requires characters to change, revise plans, or face challenges as they

[16]Pearson & Camperell (1994), *Op. cit.*

[17]Georgiou, C. (1988). *Children and their literature*. Englewood Cliffs, NJ: Prentice Hall, p. 414.

[18]Stein, N.L., & Glenn, C.G. (1979). An analysis of story comprehension in elementary school children. In R.O. Freedle (Ed.), *New directions in discourse processing* (pp. 53–120). Norwood, NJ: Ablex.

move toward resolution; and a reaction that expresses the protagonist's feelings about his or her goal attainment or relates to the broader consequences of the conclusion of the story. This structure is often referred to as a "story grammar." Characters populate each story, in major or minor roles; and themes or major ideas are stated either implicitly or explicitly.

Works of literary nonfiction such as essays, speeches, and social commentary employ distinct structural patterns and literary features to reflect their purpose and audience. These works may not only present information and ideas but also contain distinctly literary elements and devices to communicate their message. Biographies and autobiographies, for example, usually follow a narrative structure that in many ways mirrors the story structure of fictional works, but they also present information. The Gettysburg Address, for example, can be viewed simply as an argumentative text, but it is more appropriately viewed as a sophisticated literary text. Readers approach these texts not only to gain enjoyment but also to learn and to appreciate the specific craft behind authors' choices of words, phrases, and structural elements.

Like fiction and literary nonfiction, poetry is characterized by specific text characteristics. These include highly patterned language, rhythm, rhyme, verse, and imagery to express ideas.[19]

Informational Texts

For the NAEP Reading Assessment, informational texts will be classified into three broad categories:

- Exposition
- Argumentation and persuasive text
- Document and procedural text

The first kind of informational text, *exposition,* presents information, provides explanations and definitions, and compares and contrasts. Textbooks, news stories, and informational trade books are examples of expository text. Texts classified as argumentation and persuasive accomplish many of these same goals but can be distinguished by their particular purpose and by the features that authors select to accomplish their goals for writing.

The second category of informational text includes *argumentation* and *persuasive* text. Argumentation seeks to influence through appeals that direct readers to specific goals or try to win them to specific beliefs. Authors of persuasive writing must establish their credibility and authority if their writing is to be successful. Examples of persuasive text are political speeches, editorials, and advertisements.

Informational text does not have a single identifiable structure; rather, different types of informational text exhibit distinct structural features. The most common structural patterns for continuous expository, argumentative, and persuasive prose can be summarized as follows:[20]

[19]Hanauer, D.I. (in press). What we know about reading poetry: Theoretical positions and empirical research. In G. Steen & D. Schram (Eds.), *The psychology and sociology of literary text.* Amsterdam: John Benjamin Publishing.

[20]Bovair, S., & Kieras, D.E. (1991). Toward a model of acquiring procedures. In R. Barr, M.L. Kamil, P.B. Mosenthal, & P.D. Pearson (Eds.), *Handbook of reading research* (Vol. II, pp. 206–229). White Plains, NY:

Description—A descriptive text structure presents a topic with attributes, specifics, or setting information that describes that topic.

Sequence—Ideas are grouped on the basis of order or time.

Causation—The text presents causal or cause and effect relationships between the ideas presented in the text.

Problem/Solution—The main ideas are organized into two parts: a problem and a subsequent solution that responds to the problem or a question and an answer that responds to the question.

Comparison—Ideas are related to one another on the basis of similarities and differences. The text presents ideas that are organized to compare, to contrast, or to provide an alternative perspective.

The third type of text that is often categorized as informational in purpose is *procedural* or *document* text.[21] Procedural texts convey information in the form of directions for accomplishing a task. A distinguishing characteristic of such text is that it is composed of discrete steps to be performed in a strict sequence. An implicit end product or goal is also associated with procedural text. After reading the text, the reader should be able to reach a goal or complete a product. Examples include, but are not limited to, manuals and product support materials, directions for art activities and hobbies, and so forth. Procedural texts may include information arranged in graphs, charts, maps, or schematics, in addition to prose.

Expository text is often accompanied by multimedia elements. Both trade books and textbooks, for example, contain pictures, charts, graphs, and other graphic elements that are integral to the comprehension of the text. Ancillary aids such as headings, bolded text, or bulleted lists emphasize specific components of the text to reinforce authors' messages. Literary texts typically do not contain multimedia elements that are absolutely essential to the comprehension of the text itself. When multimedia elements are present in literary works (e.g., pictures), they may aid readers in understanding the text but are not usually critical for comprehension.

Some informational passages on the NAEP Reading Assessment may include specific text features that help communicate main ideas or supporting details or provide supplemental information. Examples are headings, bulleted lists, margin notes, or examples of ancillary aids or noncontinuous text. Items may be developed about these text features to assess students' ability to use them in comprehending what they read. Readers' approach to text with such components is different from their approach to continuous prose.

Longman; Meyer, B.F.S. (1975). *The organization of prose and its effects on memory.* New York: Elsevier; Stein & Glenn, *Op. cit.*

[21]Kirsch, I.S. & Mosenthal, P.B. (1990). Exploring document literacy: Variables underlying the performance of young adults. *Reading Research Quarterly, 25,* 5–30; Mosenthal, P.B. (1996). Understanding the strategies of document literacy and their conditions of use. *Journal of Educational Psychology, 88,* 314–332; Mosenthal, P.B. (1998). Defining prose task characteristics for use in computer-adaptive testing and instruction. *American Education Research Journal, 35,* 269–307.

In recognition of their pervasiveness in society, document texts will be represented on NAEP across the grade levels in a variety of forms. In grades 4 and 8, documents must be embedded within continuous text. At grade 12, documents that convey enough information to support item development may be used as stimulus material. It is also possible that two documents may be used together to create an intertextual item set (see p. 11).

Documents include graphical representations, often in a multimedia format that requires readers to draw on information presented as short continuous prose and as columns, matrices, or other formats. Research indicates that adults spend considerably more time reading documents (i.e., information in matrix or graphic form) than they do reading prose materials.[22] Documents are indeed common in our society; for example, we interpret bus schedules, navigate with a map, or mark a ballot to vote for a particular candidate. Documents are used frequently in elementary and secondary schools as well; students use textbooks that are replete with graphs, tables, and illustrations to accompany and expand on traditional text. Forms are also common, to make application or provide information, as are procedural texts, including manuals and directions. Documents have implicit procedures embedded within them. Often, readers must "cycle" through the document or the set of procedures to gain needed information or to answer specific questions. For example, an application suggests the manner in which the application is to be completed.

Document structures can be simple or complex, presenting information in a straightforward way, as in a simple list or pie graph with clearly delineated elements, or embedding or "nesting" information within the document's structure. For example, a graph might show one variable (units sold) along the vertical axis and a second variable (seasons of the year) along the horizontal axis but then further subdivide the horizontal axis according to a third variable (several years in succession).[23] Other common document formats include entry texts, which require the reader to fill in some information, and procedural texts, which generally require the reader to follow directions. Procedural texts include manuals, recipes, and product support materials. Entry texts and procedural texts will appear on NAEP only at grade 12.

Chapter 2 describes the criteria for evaluating examples and noncontinuous text and documents for inclusion on NAEP.

Percentage of Passages by Text Type and Grade

Exhibit 1 shows the recommended distribution of literary and informational passages on the 2009 NAEP Reading Assessment. The distribution reflects the changes in the kinds of texts that students read as they progress through elementary, middle, and high school.[24]

[22]Guthrie, J.T., & Mosenthal, P. (1987). Literacy as multidimensional: Learning information and reading comprehension. *Educational Psychologist, 22,* 279–297.

[23]Mosenthal, P.B. (1996). Understanding the strategies of document literacy: Variables underlying the performance of young adults. *Journal of Educational Psychology, 88,* 314–332.

[24]Alexander, P.A., & Jetton, T.L. (2000). Learning from text: A multidimensional and developmental perspective. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. III, pp. 285–310). Mahwah, NJ: Erlbaum.

EXHIBIT 1
Distribution of Literary and Informational Passages

Grade	Literary	Informational
4	50%	50%
8	45%	55%
12	40%	60%

Mixed Texts

Many of the texts that convey information are not structured precisely according to one of these patterns; these have been termed "mixed texts."[25] These texts are common in classroom reading, as students are introduced to "informational texts" as a genre distinct from the "stories" that are most common in lower grades.[26] Examples include historical or scientific accounts presented in quasi-narrative form or other narrative formats used to communicate information.

Multiple Texts

A common task for readers at all grades is integrating information across a set of texts. It is often the case that readers have multiple questions for which they need or want answers. A single text may answer some questions incompletely. Or a single text might contain answers for only a portion of the questions a reader has. The solution is to use other texts to find the additional information. In consulting multiple texts, readers must engage in all the processes to read individual texts, but they must also engage in other processes to compare those texts on multiple dimensions and decide on the accuracy, bias, and credibility of the multiple texts. These skills need to be assessed to see how well students can read and comprehend texts that contain different information, reach different conclusions about the same material, or have different levels of credibility. Continuing the use of intertextual passage sets as part of the NAEP Reading Assessment is recommended to approximate the authentic task of reading and comparing multiple texts.

Vocabulary Assessment on the 2009 NAEP Reading Assessment

The National Assessment Governing Board has endorsed the idea of measuring students' vocabulary as part of the NAEP Reading Assessment and supports an approach that assesses vocabulary in the context of the reading passages. The goal of vocabulary assessment will be the measurement of students' *meaning vocabulary*, which can be defined as follows:

> Meaning vocabulary is the application of one's understanding of word meanings to passage comprehension.

The proposed method of assessing meaning vocabulary on the 2009 NAEP Reading Assessment assumes that the ability to gain a sense of the meaning of all or most words in a

[25]Alexander & Jetton, (2000), *Op. cit.*

[26]Duke, N.K. (2000). 3.6 minutes per day: The scarcity of information texts in first grade. *Reading Research Quarterly, 35,* 202–224; Leu, D.J., Jr., & Kinzer, C.K. (2000). The convergence of literacy instruction with networked technologies for information and communication. *Reading Research Quarterly, 35*, 108 – 127.

passage—especially those words that convey important information linked to central ideas of the passage—is a necessary condition for comprehension. The NAEP meaning vocabulary items will target words already present in the NAEP reading comprehension passages. Candidate words must convey important meaning linked to the central idea(s) of the passage; comprehension would likely be disrupted if the meaning of the test word is not known. It is anticipated that each passage will have approximately two vocabulary items. The vocabulary assessment is explained in detail in Chapter 2.

Comparison of the 1992 – 2007 Reading Framework and the 2009 Reading Framework

The Framework for the 2009 NAEP Reading Assessment replaces a Framework that was first developed for the 1992 assessment. The previous Framework was refined during its use to reflect more clearly the goal of precisely measuring students' reading skills and strategies and was reissued in 2003. The 2009 Framework honors many aspects of the previous Framework but also introduces some changes that can lead to better measurement and more precise reporting of assessment results. Important changes featured in the 2009 NAEP Reading Framework follow:

- An assessment design based on current scientific reading research
- Consistency with the *No Child Left Behind* legislation
- Use of international reading assessments to inform the NAEP Framework
- A more focused measurement of vocabulary
- Measurement of reading behaviors (cognitive targets) in a more objective manner
- Distinction of cognitive targets relevant to literary and informational text
- Use of expert judgment, augmented by readability formulas, for passage selection
- Testing of poetry at grade 4, in addition to grades 8 and 12
- A special study of vocabulary to inform development of the 2009 assessment

Key similarities and differences between the two Frameworks are presented in Exhibit 2. Chapter 2 explains the proposed content and design of the 2009 NAEP Reading Assessment. The content and cognitive targets, as operationalized to reflect the definition of reading presented earlier in Chapter 1, will yield passages and items that reflect the complex interaction of the reader, the text, and the context of the assessment.

EXHIBIT 2
Similarities and Differences:
1992 – 2007 and 2009 NAEP Reading Frameworks

<table>
<tr><th></th><th colspan="2">Previous Reading Framework</th><th colspan="3">2009 NAEP Reading Framework</th></tr>
<tr><td>CONTENT</td><td>Content of Assessment:
• Literary
• Informational
• Document</td><td>Contexts for Reading:
• For literary experience
• For information
• To perform a task</td><td colspan="2">Literary Text
• Narrative
• Literary Nonfiction
• Poetry</td><td>Informational Text
• Exposition
• Argumentation and Persuasive
• Procedural and Documents</td></tr>
<tr><td>COGNITIVE PROCESSES</td><td colspan="2">Stances/Aspects of Reading:
• Forming a general understanding
• Developing interpretation
• Making reader/text connections
• Examining content and structure</td><td colspan="3">Cognitive Targets, Distinguished by Text Type
Locate/Recall | Integrate/Interpret | Critique/Evaluate</td></tr>
<tr><td>VOCABULARY</td><td colspan="2">Vocabulary as a “target” of item development, with no information reported on students’ use of vocabulary knowledge in comprehending what they read</td><td colspan="3">Systematic approach to vocabulary assessment, with potential for a vocabulary subscore</td></tr>
<tr><td>POETRY</td><td colspan="2">Poetry included as stimulus material at grades 8 and 12</td><td colspan="3">Poetry included at all grades</td></tr>
<tr><td>PASSAGE SOURCE</td><td colspan="2">Use of intact, authentic stimulus material</td><td colspan="3">Use of authentic stimulus material, plus some flexibility in excerpting stimulus material</td></tr>
<tr><td>PASSAGE LENGTH</td><td colspan="2">Grade 4: 250–800
Grade 8: 400–1000
Grade 12: 500–1500</td><td colspan="3">Grade 4: 200–800
Grade 8: 400–1000
Grade 12: 500–1500</td></tr>
<tr><td>PASSAGE SELECTION</td><td colspan="2">Expert judgment as criterion for passage selection</td><td colspan="3">Expert judgment and use of readability formulas for passage selection</td></tr>
<tr><td>ITEM TYPE</td><td colspan="2">Multiple-choice and constructed-response items included at all grades</td><td colspan="3">Multiple-choice and constructed-response items included at all grades</td></tr>
</table>

CHAPTER 2

CONTENT AND DESIGN OF THE 2009 NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS IN READING

This chapter presents the content and design of the 2009 NAEP Reading Assessment. Key sections of the chapter follow:

- Texts to be Included on the 2009 NAEP Reading Assessment
- Characteristics of Texts Selected for Inclusion on the 2009 NAEP Reading Assessment
  - Literary Text
  - Informational Text
- Vocabulary on the 2009 NAEP Reading Assessment
- Cognitive Targets for the 2009 NAEP Reading Assessment
- Item Types on the NAEP Reading Assessment

TEXTS TO BE INCLUDED ON THE 2009 NAEP READING ASSESSMENT

The 2009 National Assessment of Educational Progress in Reading will assess students' comprehension of literary and informational passages. Within these passages, vocabulary will also be assessed. Chapter 1 presented the rationale for including literary and informational text on NAEP reading, and this chapter begins by describing the text structures and features and aspects of author's craft about which items will be developed.

The matrices in Exhibits 3 and 4 show the kinds of literary and informational texts that will be sampled at grades 4, 8, and 12, along with the text structures and literary devices or elements of author's craft about which items may be developed.

The matrices are designed to show the following aspects of literary and informational text:

- Genres and types of text to be assessed
- Text structures and features about which items may be asked
- Aspects of author's craft about which items may be asked

Types of text refers to the idealized norms of a genre,[27] not the source of the stimulus material per se.

Text structures and **text features** define the organization and elements within the text. The organization and elements refer to the ways ideas are arranged and are connected to one another.

[27]Fludernik, M. (2000). Genres, text types, or discourse modes? Narrative modalities and generic categorization. *Style, 34*(2), 274–292.

Features refer to visual and structural elements that support and enhance the reader's ability to understand the text.

Author's craft pertains to the specific techniques that an author chooses in order to relay an intended message.

The entries listed within each cell of the matrices should be construed as neither definitive nor inclusive of all structures, elements, features, or techniques within author's craft. However, it is important to delineate the type of text to be used in reading comprehension tests.[28] Understanding the range of text types for inclusion in the 2009 NAEP Reading Assessment illuminates the complex nature of reading comprehension passages and the accompanying questions.

LITERARY TEXT

The literary text matrix shown in Exhibit 3 outlines the common forms of continuous prose and poetry that may be included on the 2009 NAEP Reading Assessment at grades 4, 8, and 12. The matrix is divided into three sections—narrative, literary nonfiction and poetry and —and provides information on the aspects of text about which items will be developed. Successively more complex text forms are added at each level of the matrix.[29]

[28]Kobayashi, M. (2002). Method effects on reading comprehension test performance: Text organization and response format. *Language Testing, 19,* 193–200; Wixson, K.K., & Peters, C. W. (1987). Comprehension assessment: Implementing an interactive view of reading. *American Psychologist, 23*, 333–356.

[29]Detailed explication of the literary and informational text matrices will be provided in the Specifications for the 2009 NAEP Reading Framework.

EXHIBIT 3
Literary Text Matrix: Narrative

		Genre/Type of Text	Text Structures and Features	Author's Craft
NARRATIVE	GRADE 4	Folktales Legends Fables Realistic Fiction Adventure Stories Historical Fiction Tall Tales Myths	• Themes • Morals • Lessons Organization • Plot—Sequence of Events • Conflict • Resolution Elements • Setting • Characterization	• Diction and Word Choice • Personification • Symbolism • Simile and Metaphor • Dialogue • Exaggeration • Figurative Language — Symbolism — Simile and Metaphor
	GRADE 8	Fantasy or Science Fiction Tragedy Comedy Plus Increasingly Complex Application of Grade 4	Organization • Parallel Plots • Circular Plots Elements • Point of View • Contradictions • Internal vs. External Conflict Plus Increasingly Complex Application of Grade 4	• Mood • Imagery • Flashback • Foreshadowing Plus Increasingly Complex Application of Grade 4
	GRADE 12	Satire Parody Allegory Monologue Plus Increasingly Complex Application of Grades 4 and 8	Organization • Differentiation of Plot Structures for Different Purposes and Audiences Elements • Interior Monologue • Unreliable Narrators • Multiple Points of View Plus Increasingly Complex Application of Grades 4 and 8	• Dramatic Irony • Character Foils • Comic Relief • Unconventional Use of Language Plus Increasingly Complex Application of Grades 4 and 8

EXHIBIT 3 (Continued)
Literary Text Matrix: Literary Nonfiction

		Genre/Type of Text	Text Structures and Features	Author's Craft
LITERARY NONFICTION	GRADE 4	Personal Essay Descriptive Essay Speech Autobiographical/Biographical Sketches	Organization • Description • Cause and Effect • Comparison • Chronology Text Features • Headings • Subheadings • Logical Connections • Transitions Elements • Point of View • Themes and Central Ideas • Supporting Ideas	• Diction and Word Choice • Use of Exposition, Action, or Dialogue to Introduce Characters • Exaggeration • Figurative Language — Symbolism — Simile and Metaphor
	GRADE 8	Character Sketch Memoir Plus Increasingly Complex Application of Grade 4	Increasingly Complex Application of Grade 4	• Voice • Tone • Imagery • Metaphoric Language Plus Increasingly Complex Application of Grade 4
	GRADE 12	Literary Analysis Classical Essay Plus Increasingly Complex Application of Grades 4 and 8	Increasingly Complex Application of Grade 4	• Denotation • Connotation • Irony Plus Increasingly Complex Application of Grades 4 and 8

EXHIBIT 3 (Continued)
Literary Text Matrix: Poetry

		Genre/Type of Text	Text Structures and Features	Author's Craft
POETRY	GRADE 4	Narrative Poem Free Verse Lyrical Poem Humorous Poem	Organization • Verse • Stanza • Use of White Space Text Features • Repetition • Omission • Dialogue • Line Organization • Patterns Elements • Rhyme Scheme • Rhythm • Mood • Themes and Intent	• Diction and Word Choice (including the decision to omit words that may leave the reader with much to infer) • Choice of Different Forms of Poetry to Accomplish Different Purposes • Exaggeration • Use of Imagery to Provide Detail • Figurative Language — Simile — Metaphor — Imagery — Alliteration — Onomatopoeia
	GRADE 8	Ode Song (including ballad) Epic Plus Increasingly Complex Application of Grade 4	Elements • Abstract Theme • Rhythm Patterns • Point of View Plus Increasingly Complex Application of Grade 4	• Symbolism • Personification Plus Increasingly Complex Application of Grade 4
	GRADE 12	Sonnet Elegy Plus Increasingly Complex Application of Grades 4 and 8	Elements • Complex Themes • Multiple Points of View • Interior Monologue • Soliloquy • Iambic Pentameter Plus Increasingly Complex Application of Grades 4 and 8	• Connotation • Irony • Tone • Complex Symbolism • Extended Metaphor and Analogy Plus Increasingly Complex Application of Grades 4 and 8

Narrative

As suggested in the matrix, students in elementary and middle schools read many different kinds of stories and literary nonfiction for enrichment, enjoyment, and power. These texts are representative of the developing conceptual understandings formed by students during this period. At grades 8 and 12, more complex narrative structures are common, including satires, parodies, science fiction, allegories, monologues, tragedies, and comedies. For purposes of the NAEP assessment, these complex narrative texts may be either intact passages or passages excerpted from longer, more complex narrative forms such as novels. Material that is excerpted from longer pieces will be carefully analyzed to ensure that it has the structural integrity and cohesion necessary to sustain item development.

The matrix also shows the aspects of text structure, text features, and author's craft that may be assessed. These components, as well as the purposes for reading, become increasingly complex and sophisticated in the texts that students read as they move through the elementary, middle, and high school grades. For example, themes may be more abstract; plots may involve internal or external conflicts; characterization may develop with antagonists, protagonists, and narrators with motives, beliefs, traits, and attitudes that are intertwined; the theme and setting may be more integral to each other; and the plot may consist of a series of rising and falling actions within episodes. Additionally, point of view, a complex component of narrative, becomes a component of the text structure. Generally, the point of view is not explicit; rather, it is inferred by the reader through subtle clues within the narrative. In material appropriate for grade 12 readers, theme and point of view are more complex, often including interior monologues, unreliable narrators, and multiple points of view.

Specific text features and devices chosen by an author (referred to in the matrix as *author's craft*) enhance narrative texts. An author may choose to employ a range of stylistic devices in the narrative. At grade 4, author's craft includes personification, symbolism, simile, metaphor, diction and word choice, dialogue, and exaggeration. More abstract elements are part of author's craft at grade 8 such as flashback and imagery. The narrative passages for grade 12 are complex and include the following literary devices: dramatic irony, character foils, comic relief, and unconventional use of language in addition to the devices under author's craft at grades 4 and 8.

Literary Nonfiction

The second type of literary text is literary nonfiction; it may include elements of narration and exposition and is often referred to as "mixed text."[30] Literary nonfiction is an example of mixed text because it uses literary techniques usually associated with narrative or poetry but also presents information or factual material. Stylistically, it frequently blends narrative forms of writing with factual information with the dual purpose of informing and offering reading satisfaction. The reader must be able to distinguish increasingly subtle weaving of factual material in the narrative and must be able to discern bias from fact. The text types for literary nonfiction at grade 4 include personal essays, descriptive essays, and speeches. At grade 8, additional forms of literary nonfiction are character sketches and memoirs. Complex forms of literary nonfiction at grade 12 are literary analyses and classical essays. Autobiographical and biographical works are also classified as literary nonfiction.

Although ostensibly a hybrid genre, the literary nonfiction selected for inclusion on NAEP will conform to the highest standards of literary quality. The structural elements listed in the matrix for literary nonfiction combine structures from both narrative and informational texts. Literary nonfiction is multidimensional and contains an interplay of text characteristics, which signals the complexity of this genre. At grade 4, structures and features in this type of text are description, cause and effect, comparison, chronology, point of view, themes or central ideas, and supporting ideas. At grades 8 and 12, increasingly complex structures listed above are noted in literary nonfiction. Text features such as headings, subheadings, logical connective devices, and transitional devices are listed in the matrix at grade 4.

A range of literary devices and techniques termed *author's craft* are present in literary nonfiction. Examples of author's craft at grade 4 include diction and word choice, various ways to

[30] Alexander, P.A., & Jetton, T.L. (2000). *Op. cit.*

introduce characters, exaggeration, and figurative language. At grade 8, increasingly complex techniques are listed for author's craft: voice, tone, imagery, and metaphoric language. Denotation, connotation, irony, and hyperbole are listed at grade 12 for author's craft. Grades 8 and 12 will include more complex forms of the text features, text structure, author's craft listed at grade 4.

Poetry

The third type of literary text included in the 2009 NAEP Reading Assessment is poetry. Like narratives, poetry has distinctive forms, functions, and structures further guided by literary structures and textual features. The matrix lays out the kinds of poetry that students encounter at different grade levels. Thus, basic poetic forms at grade 4 are narrative, lyrical, and humorous poems, and free verse. Additionally at grade 8, odes, songs, and epics are included in the matrix for possible item development. More complex poetic forms are included at grade 12, such as sonnets and elegies. It is possible that two poems may be used together in intertextual item sets to allow students to perform complex reading tasks, such as comparing thematic treatment in the two poems or contrasting two poets' choices of literary devices.

Readers use the structure of poetry to aid in comprehension. Poetic structures range from simple to complex. Students at grade 4 can be expected to be familiar with simple organizational patterns such as verse and stanza, along with the basic elements of rhyme scheme, rhythm, mood, and theme and intent. At grades 8 and 12, increasingly complex poetic organizational patterns and elements will be included for assessment. Students will also be expected to understand the use of "white space" as a structural feature of poetry.

Understanding a poet's choices also aids in understanding poetry. Language choice is of particular importance because the message in poetry is distilled to as few words as possible. Poets choose from among a range of rhetorical structures and figurative language, using, for example, repetition, dialogue, line organization and shape, patterns, and many forms of figurative language. Increasingly complex application of figurative language, rhetorical devices, and complex poetry arrangements are included at grades 8 and 12.

INFORMATIONAL TEXT

As stated in Chapter 1, informational text on the 2009 NAEP Reading Assessment will be of three types: exposition, argumentation or persuasive text, and procedural or document text. The following matrix, Exhibit 4, presents the ways informational text will be assessed at grades 4, 8, and 12.

EXHIBIT 4
Informational Text Matrix: Exposition

		Genre/Type of Text	Text Structures and Features	Author's Craft
EXPOSITION	GRADE 4	Informational Trade Book Textbook News Story Feature Story Encyclopedia Entry	Organization • Description • Sequence (e.g., enumeration, chronology) • Cause and Effect • Problem and Solution • Comparison and Contrast Content Features • Point of View • Topics or Central Ideas • Supporting Ideas and Evidence Graphic Features • Titles • Subheadings • Italics • Captions • Sidebars • Photos and Illustrations • Charts and Tables	• Transitional Words • Signal Words • Voice • Figurative Language and Rhetorical Structures — Parallel Structure — Quotations — Examples — Repetition — Logical Arguments
	GRADE 8	Historical Document Essay (e.g., informational, persuasive, analytical) Research Report Plus Increasingly Complex Application of Grade 4	Increasingly Complex Application of Grade 4	Increasingly Complex Application of Grade 4
	GRADE 12	Essay (e.g., political, social, historical, scientific) Plus Increasingly Complex Application of Grades 4 and 8	Increasingly Complex Application of Grade 4	Increasingly Complex Application of Grade 4

EXHIBIT 4 (Continued)
Informational Text Matrix: Argumentation and Persuasive Text

		Genre/Type of Text	Text Structures and Features	Author's Craft
ARGUMENTATION AND PERSUASIVE TEXT	GRADE 4	Informational Trade Book Journal Speech Simple Persuasive Essay	Organization • Description • Sequence (e.g., enumeration, chronology) • Cause and Effect • Problem and Solution • Comparison and Contrast Content Features • Author's Perspective or Position • Topics or Central Ideas • Supporting Ideas and Evidence • Contrasting Viewpoints/Perspectives • Presentation of the Argument (e.g., issue definition, issue choice, stance, relevance) Graphic Features • Titles • Subheadings • Italics • Captions • Sidebars • Photos/Illustrations • Charts/Tables	• Transitional Words • Signal Words • Voice • Figurative Language and Rhetorical Structure — Parallel Structure — Quotations — Examples — Repetition — Exaggeration — Emotional Appeal — Tone — Logical Arguments
	GRADE 8	Letter to the Editor Argumentative Essay More Complex Persuasive Essay Editorial Plus Increasingly Complex Application of Grade 4	Increasingly Complex Application of Grade 4	Increasingly Complex Application of Grade 4
	GRADE 12	Essay (e.g., political, social) Historical Account Position Paper (e.g., persuasive brochure, campaign literature, advertisements) Editorial Plus Increasingly Complex Application of Grade 4 and 8	Increasingly Complex Application of Grade 4	Increasingly Complex Application of Grade 4

EXHIBIT 4 (Continued)
Informational Text Matrix: Procedural Texts and Documents

		Genre/Type of Text	Text Structures and Text Features
PROCEDURAL TEXTS AND /DOCUMENTS	GRADE 4	Embedded in Text • Directions • Map • Form • Time Line • Graph • Table • Chart	Organization • Description • Procedures • Sequence (e.g., enumeration, chronology) Graphic Features • Titles • Labels • Headings • Subheadings • Sidebars • Photos, Illustrations, Charts, Graphs • Legends
	GRADE 8	Increasingly Complex Application of Grade 4	Increasingly Complex Application of Grade 4
	GRADE 12	Stand-Alone Material • Application • Manual • Product Support Material Plus Increasingly Complex Application of Grades 4 and 8	Increasingly Complex Application of Grade 4

Exposition

As they progress beyond the early grades, students read expository text with increasing frequency both in and out of school.[31] The primary goals of expository text for school-age readers are to communicate information and to advance learning. Forms that may be assessed at grade 4 are informational trade books, textbook passages, news stories, feature stories, and encyclopedia entries. At grade 8, expository text genres include historical documents and various grade-appropriate essays, and research reports. More complex essay formats will be included for assessment at grade 12, such as political, social, historical, or scientific essays that have the communication of information as their primary goal.

Expository texts are characterized by internal sets of "grammars" that are similar in function to the narrative story grammars discussed in Chapter 1. These grammars are designed to move the

[31]Broer, N.A., Aarnoutse, C.A.J., Kieviet, F.K., & Van Leeuwe, J.F.J. (2002). The effect of instructing the structural aspect of texts. *Educational Studies, 28*(3), 213–238.

exposition forward and to help the reader comprehend the text. As shown in the matrix, the major organizational structures of exposition are description, sequence, cause and effect, problem and solution, and comparison and contrast.[32] As mentioned in Chapter 1, exposition may also include lists as a structural component, with lists of descriptions, causes, problems, solutions, and views presented within the other structures. Commonly, exposition does not contain just one structural format, but rather combines several structures embedded in the text.

Specific elements within these organization structures signal meaning to the reader. Sequence, point of view, topics or central ideas, and supporting ideas and evidence are listed at grade 4; at grade 8 and grade 12, the structural organization and elements will be assessed at increasingly complex levels and with increasingly sophisticated texts.

Some surface-level features support the text structures of exposition and guide the reader through the text. Other textual features that can be categorized as reflecting author's craft; these features guide the reader through the use of transitional words, signal words, voice, figurative language, and rhetorical structures. At grades 8 and 12, increasingly complex use of these features and of the author's craft would be included for assessment.

Argumentation and Persuasive Text

Many forms of informational text pose an argument or attempt to persuade readers toward a particular viewpoint. These texts present information to support or prove a point, to express an opinion, and to try to convince readers that a specific viewpoint is correct or justifiable. As the matrix shows, there is considerable similarity in structure and literary features and elements among exposition, argumentation, and persuasive text. However, the real distinction lies in the purpose for which an author writes these particular kinds of informational text; as stated, exposition seeks to inform and educate, whereas argumentation and persuasive text seek to influence their readers' thinking in other, often subtle but significant ways.

At grade 4, argumentation and persuasive texts listed in the matrix are informational trade books that specifically argue a position or persuade the reader toward a stance, journals, speeches, and simple persuasive essays. At grade 8, there are more complex forms of argumentation and persuasive texts: letters to the editor and editorials, and argumentative and grade-appropriate persuasive essays. At grade 12, argumentation and persuasive texts become increasingly more complex with a variety of types of essays, such as political and social commentary essays; historical accounts; and position papers, such as persuasive brochures, campaign literature, and advertisements.

Particular organization techniques and elements are used to create a clear argument or to form a persuasive stand. The differences between exposition and argumentation and persuasive text lie not in the structural organization, but in the way the texts are elaborated through the use of contrasting viewpoints, shaping of arguments, appeals to emotions, and other manipulations of the elements of text and language. The organizational structures at all levels are the same as in exposition: description, sequence, cause and effect, problem and solution, and compare and contrast; they are represented in grades 8 and 12 with increasing complexity.

Elements within these organizational structures include the author's perspective, topics or central ideas, supporting ideas, contrasting viewpoints or perspectives; and the presentation of the

[32]Meyer, 1975, Op. cit.

argument (e.g., issue definition, issue choice, stance, and relevance). These elements appear at all grade levels, with increasing complexity at higher grade levels.

Procedural Texts and Documents

Research indicates that adults spend considerably more time reading documents (i.e., information in matrix or graphic form) than they do reading prose materials.[33] Documents and procedural texts are indeed common in our society; for example, we interpret bus schedules, assemble simple devices, order goods from a catalog, or follow directions to set the VCR clock. Such texts are used frequently in elementary and secondary schools, where students encounter textbooks that are replete with graphs, tables, and illustrations to accompany and expand traditional continuous text.

Procedural text may be primarily prose, arranged to show specific steps toward accomplishing a goal, or may combine both textual and graphic elements to communicate to the user. Documents, in contrast, use text sparingly, in a telescopic way that minimizes the continuous prose that readers must process to gain the information they need.

As the matrix shows, document texts on the 2009 NAEP Reading Assessment may include, but are not limited to, lists, tables, and charts. Stand-alone procedural text or documents will not be included at grades 4 and 8; such text will be embedded in or ancillary to continuous text. They may appear as stand-alone stimuli at grade 12, but their use will account for only a small amount of the stimuli in the entire assessment. It is likely that many of the documents may be used as part of intertextual item sets. For example, a student might encounter a bar graph and a time line with items that relate to both texts.

Documents and procedural text features act as necessary clues to the organization of the text. As textual supports, these features guide the reader through the text. For the purposes of the 2009 NAEP Reading Assessment, textual features include titles, labels, headings, subheadings, sidebars, photos and illustrations, charts and graphs, and legends at grades 4, 8, and 12. As the grade level goes up, more complex examples will be included.

CHARACTERISTICS OF TEXTS SELECTED FOR INCLUSION ON THE 2009 NAEP READING ASSESSMENT

Passages selected as stimulus material for the 2009 NAEP Reading Assessment must meet rigorous criteria. They will all be authentic texts of the highest quality, evidencing characteristics of good writing, coherence, and appropriateness for each grade level. Passages will be drawn from a variety of contexts that are familiar to students nationwide. Stimulus material must be engaging to students at each grade level. Further, material must reflect our literary heritage by representing many historical periods.

[33]Guthrie, J.T., & Mosenthal, P. (1987). Literacy as multidimensional: Learning information on reading comprehension. *Educational Psychologist, 22,* 279–297. Kirsch, I.S., & Mosenthal, P.B. (1990). Exploring document literacy: Variables underlying the performance of young adults. *Reading Research Quarterly, 25,* 5–30; Mosenthal, P.B. (1996). Understanding the strategies of document literacy and their conditions of use. *Journal of Education Psychology, 88,* 314–332; Mosenthal, P.B. (1998). Defining prose task characteristics for use in computer-adaptive testing and instruction. *American Education Research Journal, 35,* 269–307.

> It is true that children's experience differs from that of adults, and therefore the application of standards should be consonant with child life. Nevertheless, one must keep in mind the emotional maturity of the children for whom the book or books are intended. This does not mean that the works must be watered down so as to meet the reading ability levels of young children. On the contrary, some books of lasting value outstrip their vocabulary lists and connect with children on emotional-maturity levels so that they can be understood and enjoyed by the young themselves….[T]he standards basic to good writing in adult literature are also basic to good writing for children.[34]

Most material included on the assessment will be presented in its entirety, as students would encounter it in their own reading. However, some material may be excerpted, for example, from a novel or a long essay. Excerpted material will be carefully analyzed to ensure that it is coherent in structure.

Passage Length

Material on the assessment will be of differing lengths, as shown in Exhibit 5.

EXHIBIT 5
Passage Lengths for Grades 4, 8, and 12

Grade	Range of Passage Lengths (Number of Words)
4	200 – 800
8	400 – 1,000
12	500 – 1,500

Passages of these lengths are recommended for several reasons. To gain the most valid information about students' reading, stimulus material should be as similar as possible to what students actually encounter in their in-school and out-of-school reading. Unlike many common reading tests that use short passages, NAEP will present longer material that challenges students to use their strategic reading skills in ways that reflect the kinds of reading they do in nontest situations.[35] Further, short passages usually will not yield approximately 10 distinct items, the required minimum number for each NAEP item set. Longer passages, with clear structural patterns, can support the development of multiple, distinct, nontrivial items that cover the range of content included in the Literary and Informational Text matrices. These items will also allow broad coverage of the cognitive targets discussed later in this chapter.

It is expected that in some cases, two poems will be used together to assess students' ability to compare them in terms of their themes and stylistic features. Prose passages used in intertextual

[34]Georgiou, C. (1988). *Children and their literature*. Englewood Clilffs, NJ: Prentice Hall, p. 46.

[35]Paris, S.G., Wasik, B.A., & Turner, C.J. (1991). The development of strategic readers. In R. Barr, M.L. Kamil, P. Mosenthal, & P.D. Pearson (Eds.), *The handbook of reading research* (Vol. II, pp. 609–640). Mahwah, NJ: Erlbaum.

item sets will also be fairly short. Likewise, it is possible that two documents might be included as intertextual stimuli at grade 12.

Selection of Literary and Informational Passages

Several methods of evaluating passages will be used to ensure that the best possible stimulus material is included on the 2009 NAEP Reading Assessment. Authentic material must be of the highest quality, and it must come from authentic sources such as those students would encounter in their in-school and out-of school reading. Material must be coherent and allow items that assess domain-specific knowledge.[36] Additionally, systematic efforts will be made to ensure that texts selected for inclusion on the 2009 NAEP Reading Assessment will be interesting to the widest number of students. Readers become more engaged in text and consequently comprehend a selection better when they find the material interesting.[37] Texts will reflect our literary heritage by representing varied historical periods.

Passages selected for inclusion on the assessment will be well written, interesting to read, and "considerate," that is, easily comprehensible because they are well organized, have appropriate vocabulary, and, where needed, have useful supplemental explanatory features such as definitions of technical terms or topographical features. Ideas marked by topographical features such as italics, bold print, and signal words and phrases tend to be processed more easily and recalled longer than unmarked information. In selecting passages, attention will be paid to written clues within text that can help readers understand structure, guide the development of main ideas, and influence the recall of information. For example, readers tend to organize and remember the emphasized information better when authors lead them with signal words indicating main ideas (for example, *the most important point here*), with phrases indicating sequencing (such as words like *first, second, third*), and with statements cross-referencing disparate parts of text.[38]

Especially in the selection of informational text, the degree of content elaboration will be an important criterion for passage selection. Sufficient elaboration of new concepts is needed if students are to gain sufficient information to respond to questions. Tersely written informational text tends to be more difficult for students to comprehend than text written with more elaborated explanations. Whether text is tersely written or presents fully elaborated content is particularly important with topics that may be beyond the background knowledge of some students.

An inviting writing style can also enhance interest and thereby increase comprehension. Material may be interesting not because of *what* is said but because of *how* it is said. For example, writers can increase interest by using active rather than passive verbs, by including examples that make the writing less abstract, and by using vivid and unusual words. An inviting writing style also

[36]Kobayashi, M. (2002), *Op. cit.*

[37]Baumann, J. (1986). Effect of rewritten textbook passes on middle-grade students' comprehension of main ideas: making the inconsiderate considerate. *Journal of Reading Behavior, 18,* 1–22; Wade, S., Buxton, W., & Kelly, M. (1999). Using think-alouds to examine reader-text interest. *Reading Research Quarterly, 34*(2), 194–213; Wade, S., & Moje, E. (2000). The role of text in classroom learning. Classroom language and literacy learning. In M. Kamil, P. Mosenthan, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. III, 609–627. Mahwah, NJ: Earlbaum; Wade, S., Schraw, G., Buxton W., & Hayes, M. (1993). Seduction of the strategic reader: Effects of interest on strategy and recall. *Reading Research Quarterly, 28*(2), 92–114.

[38]Armbruster, B. B. (1984). The problem of "inconsiderate text." In Duffy, G.G., Roehler, I.R., & Mason, J. (Eds.), *Comprehension instruction* (pp. 202–217). New York: Longman.

influences voice. Voice, the qualities that help a reader view text as communication between an author and a reader, can have a positive effect on recall.[39]

Expert judgment will be the primary method for evaluating and selecting passages for inclusion on the assessment. Additional methods include the use of story and concept mapping and vocabulary mapping. Two research-based readability formulas will also be used to gather additional information about passage difficulty. Passages will be thoroughly reviewed for potential bias and sensitivity issues.

Story and concept mapping[40] procedures have been used to identify appropriate passages for previous NAEP Reading Assessments. These procedures result in a graphic representation of a possible stimulus selection that clearly highlights the hierarchical structure and the interrelatedness of the components of the passages. Story mapping, for example, will show how the setting of a story is related to and contributes to the development of plot and theme. Concept mapping shows the structure of informational text, along with the concepts presented and the relational links among concepts. Organizing information hierarchically within a passage allows the identification of the various levels of information within a text so that items can target the most important aspects of what students read. As NAEP begins to assess vocabulary in a systematic way, the story and concept mapping procedures will be modified to ensure that the words selected for item development are appropriate.

Selection of Poetry

In selecting poetry for the 2009 NAEP Reading Assessment, it will be important to determine that potential poems present a theme instead of stressing primarily the melodic or stylistic aspects of language use. Especially at grades 4 and 8, the theme should be implicitly presented in terms that are not so abstract that they are beyond students' comprehension. Words and phrases should be used with economy to support and amplify the meaning inherent in the text; the style should be distinguished by author's craft and project the poet's feelings about his or her topic or theme. The ideas presented must be accessible to students, and it must be clear that poetry, rather than prose, is the best mode for presenting these ideas. A good question to ask in selecting poetry is

> Does the poetry, through its expression of theme and ideas, carry children beyond their immediate experiential level to extensions where language and imagination meet?[41]

Selection of Multimedia Components of Text and Documents

Multimedia components of text and stand-alone documents must be carefully evaluated for inclusion on the 2009 NAEP Reading Assessment. An analysis of layout will be essential to ensure that multimedia text is used appropriately, in a way that is well integrated into the prose text and is not gratuitously distracting. The number of categories of information presented graphically and the clarity of the layout of documents will be essential criteria for selecting documents to be included on

[39]Beck, I., McKeown, M., & Worthy, J. (1995). Giving a text voice can improve students' understanding. *Reading Research Quarterly, 30,* 220–238.

[40]Wixson, K.K., & Peters, C.W. (1987) Comprehension assessment: Implementing an interactive view of reading. *Educational Psychologist, 22*, 333–356.

[41]Georgiou, C. (1988). *Op. cit.,* p. 136.

the assessment. The vocabulary and concept load of multimedia elements and of documents will also be considered.

Exhibit 6 summarizes the criteria to be used to select passages and documents for the 2009 NAEP Reading Assessment.

EXHIBIT 6
Criteria for Selecting Stimulus Material for the 2009 NAEP Reading Assessment

Literary Text	Informational Text	Graphical Displays of Information
• Ability to engage readers • Theme/topic appropriateness by grade level • Representative of varied historical periods • Reflective of our literary heritage • Number of characters • Complexity of characters • Appropriateness of vocabulary • Sophistication in use of literary devices • Complexity of dialogue • Point of view • Complexity of theme • Multiple theme (major/minor) • Use of time (flashbacks, progressive/digressive) • Illustrations • Style • Appropriateness of mode (prose vs. poetry)	• Ability to engage readers • Varied historical periods • Topic appropriateness by grade level • Appropriateness of vocabulary • Concepts (number, familiarity, abstractness) • Curricular considerations at grade level • Integrity of structure • Coherence • Types of adjunct aids • Explicitness of perspective • Style	• Structural complexity • Topic appropriateness by grade level • Appropriateness of vocabulary • Concepts (number, familiarity, abstractness) • Number of categories of information presented • Amount of information within categories

VOCABULARY ON THE 2009 NAEP READING ASSESSMENT

The 2009 NAEP Reading Assessment will include an assessment of the vocabulary in the context of passages that students read. Vocabulary knowledge is considered to be one of the five essential components of reading as defined by the *No Child Left Behind* legislation. In this context, vocabulary is construed not as isolated word meanings but as real knowledge of vocabulary that can advance comprehension.

NAEP will not test definitions in isolation from surrounding text; that is, students will not be assessed on their prior knowledge of definitions for words in isolation. The definition of *meaning vocabulary* that will guide the development of the assessment is repeated here:

> Meaning vocabulary is the application of one's understanding of word meanings to passage comprehension.

The Importance of Vocabulary for Reading Comprehension

The association between reading comprehension and vocabulary is well documented in research:

- Correlation studies find high correlation coefficients for reading comprehension and vocabulary.[42]
- Factor analyses have repeatedly found vocabulary to be a fundamental factor of reading comprehension.
- Not knowing the meaning of words as used in a given text may result in decreased comprehension of that text.

Comprehending any reading passage requires knowing the meaning of the important content-bearing words of that passage, but often, the meaning of many key words in a passage depends on the meaning of the text.[43] As word meaning and passage meaning interact, any measurement of word meaning by NAEP should be integrated with the measurement of passage comprehension.

Several major factors are known to affect readers' comprehension of what they read and can highlight the connection between word meaning and passage meaning; these include

- the context for reading (e.g., for study, for skimming, for leisure);
- fluency in identifying the words of the text, background or domain knowledge of the content of the text;
- knowledge of "the sense of the meaning"[44] of the words the author uses to convey important content; and
- comprehension monitoring.

Reasons for Assessing Vocabulary on NAEP Reading

In light of the growing body of research supporting the argument that vocabulary is crucial to reading comprehension, it is fitting that NAEP include a systematic measure of vocabulary as part of its reading assessment. Past NAEP Reading Assessments have included a few vocabulary test items, all of which measured vocabulary in context; however, the number of items was scant and there were no specific vocabulary-related criteria for selecting the items or distractors. Further, NAEP reports provided no information about performance on those items or how vocabulary performance might be related to reading comprehension. This change for 2009, then, is significant. All vocabulary items

[42]The complete list of references substantiating vocabulary assessment is included in Appendix D.

[43]Baumann, J.F., Kame'enui, E.J., & Ash, G.E. (2002). Research on vocabulary instruction: Voltaire redux. In J. Flood, D. Lapp, R. Squire, & J. Jensen (Eds.), *Handbook of research on the teaching of the English language arts* (pp. 752–785). Mahwah, NJ: Erlbaum; Landauer, T.K., Foltz, P.W., & Laham, D. (1998) An introduction to latent semantic analysis. *Discourse Process, 25,* 259–284.

[44]Miller, G.A. (1991). *The science of words.* New York: Scientific American Library.

will function both as a measure of comprehension of the passage in which the word is included and as a test of readers' specific knowledge of the word's meaning as intended by the passage author, with a sufficient number of items to provide reliable and valid data for analysis and interpretation.

Past reports from NAEP provided little information on how students performed on the vocabulary items and whether that performance was associated with comprehension achievement levels; thus, these reports did not provide a foundation for emphasizing the importance of vocabulary to reading comprehension. Although research supports the importance of vocabulary in reading comprehension, this importance will be more widely understood and disseminated with

- NAEP's initiative specifying vocabulary as a major component of its reading comprehension assessment;
- NAEP reports providing quantitative data about the performance of 4th, 8th, and 12th grade students on these measures of vocabulary and the developmental differences between grades; and
- NAEP reports describing the differences between Advanced, Proficient, Basic, and Below Basic readers on vocabulary, and the implications of these differences.

The Measurement of Meaning Vocabulary

NAEP will not ask students to draw on their prior knowledge by providing a written definition of each word on a list or in a set of words. Instead, items will be developed about the meaning of words as they are used in the context of the passages that students read. There are two reasons for this approach. First, knowledge as explicit as a written definition of a word is not the specific ability required for passage comprehension. Indeed, reading comprehension may readily occur even when the reader cannot provide an accurate and complete definition of any of the major content words of the text. In reality, readers may not be able to provide a word's complete definition but do have enough of the sense of the word's meaning to gain meaning from that word when used in text.

A second argument against a test's demanding specific definitions of a word is that word meaning often depends on the context in which the word appears. Finding out whether readers know one specific definition of a word will not tell us whether readers understand that word as it is used in a given text. Indeed, there is evidence that when readers know one meaning of a word but do not know a different meaning as used in the text, readers try to alter the meaning of the text in keeping with the meaning of the word that they do know—leading, of course, to misunderstanding the text.[45] In addition, writers often use words in a manner that goes beyond their concrete, familiar definition but do so in ways that skilled readers can interpret effectively. Jacques Barzun describes this:

> Language is not an algebra; that is, the symbols do not stay put, nor can they be carried from place to place with an assurance that their value will not change. If language were like an algebra there could be no poetry or other fiction, no diplomacy or intimate correspondence, no persuasion or religious literature. If language were like an algebra, uncomfortable would mean not

[45]Deegan, D.H. (1995). Exploring individual differences among novices reading in a specific domain: The case of law. *Reading Research Quarterly, 30*, 154–170.

able to be comforted, and a myriad other nuances of human feelings would have to remain unrecorded and unshared.[46]

Criteria for Selecting Vocabulary to Be Assessed

In selecting passages for the 2009 NAEP Reading Assessment, test developers must create a "map" of the story or the expository selection to identify the key features of the passage. This procedure has included identifying candidates for vocabulary items, but the process will be enhanced to ensure that passages contain enough candidate words or terms for item development.

The intent of the vocabulary assessment is not to measure readers' ability to learn new terms or words; instead, the purpose is to determine whether readers know and understand the meanings of the words that writers use to convey new information or meaning. Hence, the assessment will focus on words that grade-level readers should have heard or seen at some time in their language history, though it is expected that for the majority of readers, the words will not likely be part of their regular speaking or writing vocabularies. In general, the words selected as targets for item development should occur frequently in the language of mature readers and are used in texts from a variety of content domains.[47] These will be words that convey concepts, objects, ideas, actions, or feelings that the readers most likely know. Criteria for selecting words for item development are summarized in Exhibit 7.

Words that are appropriate for inclusion on the NAEP Reading Assessment denote *concepts* or *things* that readers already know. That is, the word denotes an object, idea, feeling, or action that has been experienced or has been seen by the reader. However, the test item is not designed to determine whether readers know the thing, but rather whether readers are able to link this knowledge (object, idea, feeling, action) to the word the author uses to convey this meaning. NAEP presumes that most readers will likely have the background knowledge of the object, idea, feeling, or action in a passage, but—because the words are difficult and uncommon—readers may not readily link that knowledge to the specific word the author uses to convey that meaning. If readers do not connect a meaning with the author's word, their comprehension will suffer. The NAEP vocabulary items are designed to test readers' ability to connect an appropriate meaning to the candidate words to gain comprehension. Thus, test items will not target technical terms or words identifying the central idea(s) of the passage because those words often represent new knowledge, concepts, or conceptualizations for readers. Passage comprehension items will measure readers' learning from text; vocabulary items will measure readers' knowledge of certain important words the author uses to impart this meaning. See Appendix B for sample vocabulary items.

[46]Barzun, J. (1987). *Simple and direct.* New York: Harper Row.

[47]Beck, McKeown, and Kucan refer to these as "tier 2" words. This term distinguishes them from tier 1 words, common, everyday words basic to the speech and writing of most students, and from tier 3 words, rarely used words or technical terminology. See Beck, McKeown, and Kucan (2002), as cited in Appendix D.

EXHIBIT 7
Criteria for Selecting Vocabulary Items and Distractors for the 2009 NAEP Reading Assessment

Words Selected for Inclusion	Words Excluded From Selection	Criteria for Distractors
• Are high-frequency words for mature language users and characterize written rather than oral language • Label generally familiar and broadly understood concepts, even though the words themselves may not be familiar to younger learners • Convey meaning central to the passage such that lack of understanding may disrupt comprehension • Are likely to be found in grade-level reading material	• Are technical terms (e.g., photosynthesis, fiduciary) • Convey the main idea of the passage (e.g., eminent domain) • Are those already likely to be part of students' everyday speaking vocabulary at the grade level	• May be other meanings of the target vocabulary word • May present other information or content from the text but do NOT present what is meant by the target word • May be other words that look or sound similar to the target word

Clearly, some readers will know and understand some test words before taking the NAEP assessments. This is unavoidable, and these students will probably be highly able readers. Further, we anticipate that some readers will not have the background to link to the author's words and thus will either choose an incorrect response for the item because of their background knowledge or identify the meaning of the word from context and mark the correct response. These are again probably advanced readers. Recognizing this possibility, NAEP will ensure that the vocabulary test items represent a continuum of difficulty across readers at a given grade (as will reading passages and comprehension items). The intent is to identify words that the majority of grade-level students do not generally use in speaking or writing, but that such students have seen or heard at least a few times.

COGNITIVE TARGETS FOR THE 2009 NAEP READING ASSESSMENT

Items will be developed for the 2009 NAEP Reading Assessment to assess students' comprehension of literary and informational text. Further, test questions will be aligned to cognitive dimensions that are applicable to literary or informational texts and also to cognitive dimensions that are specific to each text type. The remainder of the chapter presents these cognitive dimensions that are targeted by the items (hence the term cognitive targets) and discusses the item types that are included on the assessment. Inclusion of specific cognitive targets in the 2009 Reading Framework

reflects the intent of the definition of reading that guides the assessment. The definition, explained in Chapter 1, follows:

Reading is an active and complex process that involves

- understanding written text;
- developing and interpreting meaning; and
- using meaning as appropriate to type of text, purpose, and situation.

Exhibit 8 presents the cognitive target matrix for the development of items to be used on the 2009 NAEP Reading Assessment. The cognitive targets remain the same across all three grades on the assessment, but the passages and documents about which items are developed will be of increasing sophistication at each grade.

Reading Processes Included in the Cognitive Target Matrices

The reading processes included in the three sections of the cognitive target matrix, Exhibit 8, illustrate the complex nature of reading. The research literature contains numerous studies that show how students use different reading processes when reading various types of text (see Chapter 1). Hence, the sections of the matrix representing literary and informational text emphasize that different texts elicit different kinds of reading behaviors. The reading processes presented in the matrix are also grounded in the research literature on comprehension, most specifically the literature that uses protocol analysis ("think-alouds") as its research methodology.[48] The behaviors presented in Exhibit 8 are illustrative, not comprehensive. The *Specifications for the 2009 NAEP Reading Assessment* will provide a detailed listing of the cognitive targets for item development.

[48]Garner, R. (1982). Verbal-report data on reading strategies. *Journal of Reading Behavior, 14,* 159–167; Guthrie, J., Britten, T., & Barker, K. (1991). Roles of document structure, cognitive strategy, and awareness in searching for information. *Reading Research Quarterly, 25,* 300–324; Norris, S., & Phillips, L.M. (1987). Explanations of reading comprehension: Schema theory and critical thinking theory. *Teachers College Record, 38,* 281–306; Pressley & Afflerbach, *Op.cit.;* Olshavsky, J. (1976–77). Reading as problem solving: An investigation of strategies. *Reading Research Quarterly, 12,* 654–674.

EXHIBIT 8
Cognitive Targets for 2009 NAEP Reading Assessment[49]

	Locate/Recall	Integrate/Interpret	Critique/Evaluate
Cognitive Behaviors for Literary and Informational Text	Provide specific information about • Explicit major ideas • Supporting details or facts Locate facts or a definition Make straightforward inferences	Connect ideas within or across texts Describe problem and solution, cause and effect Make inferences about text organization and relation to important information Compare ideas, problems, or situations Infer a story's mood or tone	Evaluate author's craft and technique Describe how the author's word choice affects meaning Determine unstated assumptions in an argument Determine which ideas and themes carry the weight of the meaning in a given text
Cognitive Behaviors Specific to Literary Text	Provide specific information about • Explicit character traits • Plot • Time period • Explicit elements of setting	Integrate information to determine theme Identify or interpret a character's motivation Infer alternative actions of characters Examine relations between theme and setting or characters Describe relations between and among characters	Evaluate the role of literary devices in conveying meaning Determine how literary devices enhance a literary work Describe how an author devises a particular effect (e.g., a mood, a surprise ending)
Cognitive Behaviors Specific to Informational Text	Find a topic sentence or main idea Identify explicitly stated author's purpose Find information that is relevant to the goal of reading Identify explicitly stated causal relations	Make inferences about implied relations among ideas Find evidence in support of an argument Connect conclusions with supporting information Analyze similarities or differences of arguments Infer a real-world application of text information Distinguish facts from opinions	Evaluate validity of information Evaluate strength and quality of evidence used by author to support his or her position Judge the coherence or credibility of an argument

Locate and Recall

The first cognitive behaviors are *locate* and *recall.* As students locate or recall information from what they read, they may identify clearly stated main ideas or supporting details or they may find essential elements of a story, such as characters, time, or setting. Their process in answering assessment items often involves matching information given in the item to either literal or synonymous information in the text before they can then use the textual information to develop a

[49]The Cognitive Targets matrix is for illustrative purposes only and should not be considered an exhaustive list. The cognitive targets will be elaborated further in the Specifications for the 2009 NAEP Reading Assessment.

response. As readers engage in these behaviors, they monitor their reading in order to understand when they are comprehending and when they are not. When they realize that the text is not making sense, they employ specific strategies to ensure that they begin to comprehend again.

> A salient activity [in reading] is to find the main ideas in the text and make certain that these ideas are remembered—or at least can be found again if needed. The big ideas, of course, are always relative to the goals of the reading with respect to the text. That is, very different ideas may be considered main ideas if a reader is reading for one purpose versus another.[50]

Items assessing this component of reading usually focus on information contained in relatively small amounts of text—a sentence, a paragraph, or two or more adjacent paragraphs. These items provide information about the most basic comprehension skills, those that ultimately form the foundation for a more elaborated understanding of what is read. At the same time, these items address the kinds of reading that occur routinely in school and out-of-school reading activities.

> Regardless of a reader's goal—whether reading is done in preparation for a test, in anticipation of a writing assignment, with the expectation of sharing it in a conversation, to determine an author's perspective, or as part of staying abreast in an area of interest—it is necessary to identify the important information in a text.[51]

Integrate and Interpret

The next set of reading behaviors refers to what readers do as they *integrate* new information into their initial sense of what a passage says, often *interpreting* what they read in the process. Behaviors involving integrating and interpreting include making comparisons and contrasts of information or character actions, examining relations across aspects of text, or considering alternatives to what is presented in text. This aspect of the reading process is critical to comprehension and can be considered the stage in which readers really move beyond discrete information, ideas, details, themes, and so forth presented in the text and extend their initial impressions by processing information logically and completely. As readers integrate information and interpret what they read, they frequently form questions, use mental images, and make connections that draw on larger sections of text, often at an abstract level. They are also drawing on their knowledge of the structure and elements of narrative and informational text.

In applying these behaviors, readers invariably think across large portions of text, across the text as a whole, or even across multiple texts; they relate textual information to knowledge from other sources, such as their previous content learning, or to internalized criteria and logic. Thus, readers might ask themselves whether something they are reading makes sense to them within the realm of their own experiences or when considered against what they have read in other sources. They analyze the text in terms of their specific reading goals or the needs they have for the information that the text can provide to them. In certain reading situations, readers may apply what they know to what they are reading, for example, determining a real-world application of suggestions in a text on bicycle safety. They also apply information gained from reading, for example, in

[50]Pressley & Afflerbach (1995), *Op cit.,* p. 44.
[51]Pressley & Afflerbach (1995), *Op cit.,* p. 31.

following instructions for repairing a bicycle or reading a map to determine where bike routes have been designated in a city.

> Readers are aware of many different aspects of text and the reading task they are performing from the outset of reading. Their perceptions of the text and how it relates to their task/reading goals does much to shape the processing of text, with readers processing some parts of the text superficially and others very carefully. . . . Good readers not only know what they are doing, but why they are doing it, ever aware of the characteristics of text they are confronting and their own reading goals.[52]

Items assessing these behaviors might ask students to form generalizations about a piece of informational text or make statements about how the setting of a story contributes to the creation of theme. Other items might require interpretation, for example, of a character's motivations or of an author's reasons for attempting to persuade readers about an issue. Other questions might ask for alternative actions that a character might have taken, or an interpretation of an implied message or moral from a story.

Critique and Evaluate

The final set of reading behaviors—*critiquing* and *evaluating* text—requires readers to stand back from what they read and view the text objectively. The focus remains on the text itself, but the readers' purpose is to consider the text critically by assessing the text from numerous perspectives and synthesizing what is read with other texts and other experiences. Items may ask students to evaluate the quality of the text as a whole, to determine what is most significant in a passage, or to judge the effectiveness of specific textual features to accomplish the purpose of the text (e.g., the effectiveness of details selected to support a persuasive argument). Items might ask for the likelihood that an event could actually have taken place, the plausibility of an argument, or the adequacy of an explanation for an event. Items can ask students to focus at the level of language choices (e.g., nuances expressed in a metaphor) or at the broader level of the entire text (e.g., evaluating the effectiveness of an author's craft to accomplish his or her overall goals). To answer these questions, students draw on what they know about text, about language, and about the ways authors manipulate language and ideas to achieve their goals.

> Sometimes readers recognize from the very start that they are likely to be evaluative with respect to a text, and likely to react to it affectively. . . . Although some readers evidence great consistency in their evaluative stances as they read some texts, evaluations are often much more discriminated. Regardless of whether a reader is globally positive, globally negative, or a mixture of both, evaluations occur with respect to the style and context of text.[53]

[52]Pressley & Afflerbach (1995), *Op cit.,* p. 68
[53]Pressley & Afflerbach (1995), *Op. cit.,* p. 76.

ITEM TYPES ON THE 2009 NAEP READING ASSESSMENT

The 2009 NAEP Reading Assessment will include multiple-choice and constructed-response items. Both item types yield valuable information about students' reading and allow a rich, full description of how the nation's students approach different kinds of text. The inclusion of both types of items on NAEP Reading affirms the complex nature of the reading process because it recognizes that different kinds of information can be gained from each item type. It also acknowledges the real-world skill of being able to write about what one has read.

Multiple-choice items will include four options: the right response and three incorrect responses. It is assumed that a multiple-choice item will take students approximately one minute to complete. Short constructed-response items can be answered by one or two phrases or by one or two sentences; they should take students approximately two to three minutes to complete. Extended constructed-response items should elicit longer, more elaborated answers of a paragraph or two. They should take students approximately five minutes to complete. Scoring rubrics for short and extended constructed-response items will focus on the content included in answers, not on spelling or grammatical considerations. However, students must answer constructed-response questions by using information from the text to receive credit. Details regarding the scoring and short and extended constructed-response items appear in *The Specifications for the 2009 NAEP Reading Assessment*, which will be published separately.[54]

The distribution of multiple-choice and constructed-response items will vary across the grades assessed by the 2009 NAEP Reading Assessment. The percentages in Exhibit 7 refer to the amount of assessment time that students will spend responding to these particular kinds of items. Hence, grade 4 students will spend approximately 50 percent of the assessment time responding to multiple-choice items and 50 percent of the assessment time preparing written responses. Students at grades 8 and 12 will spend more time preparing written responses.

Approximately two items per passage will assess vocabulary knowledge. These items may be either multiple choice or short constructed response in format.

Exhibit 9 shows the distribution of time to be spent on each kind of item.

EXHIBIT 9
Distribution of Time to Be Spent on Specific Item Types

Grade	Multiple Choice	Short Constructed Response	Extended Constructed Response
4	50%	40%	10%
8	40%	45%	15%
12	40%	45%	15%

[54]The *Specifications for the 2009 NAEP Reading Assessment* will provide detailed information about the kinds of reading selections to be used for the assessment, item types, and scoring criteria for constructed-response items. This document will guide the development of the assessment.

Less time is allocated to constructed-response items at grade 4 to reflect the developmental differences across the three grades that are assessed. Students at grade 4 may not be as familiar with written responses to reading questions as older students are. The measure of comprehension at grade 4 may therefore be confounded by students' lack of familiarity with the process of writing in response to reading.[55]

[55]Kobayashi, M. (2002). Method effects on reading comprehension test performance: Text organization and response format. *Language Testing, 19*, 193–220.

CHAPTER 3

REPORTING THE RESULTS OF THE NAEP READING ASSESSMENT

Results of the NAEP Reading Assessment administrations are reported in terms of average scores for groups of students on the NAEP 0–500 scale and as percentages of students who attain each of the three achievement levels, Basic, Proficient, and Advanced, discussed below. The NAEP Reading Assessment is an assessment of overall achievement, not a tool for diagnosing the needs of individuals or groups of students. Reported scores are always at the aggregate level. By law, scores are not available for individual schools or students. Results are reported for the nation as a whole, for regions of the nation, for states, and for large districts that volunteer to participate in the NAEP trial urban assessments.

No Child Left Behind Provisions for NAEP Reporting

Under the provisions of the *No Child Left Behind* legislation, states receiving Title I grants must include assurance in their state plans that they will participate in reading and mathematics state NAEP at grades 4 and 8. Local districts that receive Title I funds must agree that they will participate in biennial NAEP administrations at grades 4 and 8 if they are selected to do so. Their results will be included in state and national reporting. Participation in NAEP will not substitute for the mandated state-level assessments in reading and mathematics at grades 3 to 8.

In 2002, NAEP initiated a trial urban district assessment (TUDA) in five large urban school districts that are members of the Council of Great City Schools (Atlanta City, City of Chicago, Houston Independent School District, Los Angeles Unified, and New York City Public Schools). Ten large districts participated in 2003, and 10 will take part in the 2005 TUDA. Large districts that participate in the urban district assessment in the future will receive their own data, which they can use for assessing the achievement of their own students and for comparative purposes.

Achievement Levels

NAGB has adopted student achievement levels for reporting results on NAEP assessments. The achievement levels represent an informed judgment of "how good is good enough" in the various subjects that are assessed. The generic policy definitions for Basic, Proficient, and Advanced that follow describe in very general terms what students at each grade level should know and be able to do on the assessment. Reading-specific achievement levels will be developed to elaborate the generic definitions that NAGB has adopted. These preliminary achievement level descriptions will be included in the next Reading Framework draft. Exhibit 10 presents these generic achievement-level definitions.[56]

[56]Recommendations for reading-specific achievement levels will be developed in mid 2004.

EXHIBIT 10
Generic Achievement Levels for the National Assessment of Education Progress

Advanced	This level signifies superior performance.
Proficient	This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
Basic	This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.

Reporting NAEP Results

The primary vehicles for reporting NAEP reading results are the *Reading Highlights* and *Reading Report Cards* that are issued after each assessment administration. These reports provide detailed information on the assessments, the students who participated, and the assessment results. Results are disaggregated by specific groups and are also presented for states that participate in the NAEP state assessment. Among the focal groups are males and females, students from various racial/ethnic backgrounds, and students who took the assessment with and without accommodations.

NAEP data and information about the assessments are also available electronically through the NAGB (www.nagb.org) and the National Center for Education Statistics/NAEP (www.nces.ed.gov/nationsreportcard) Web sites. Further, the *NAEP Report Generator* tool can be used by interested education administrators, researchers, and other stakeholders to develop focused reports. The *NAEP e-Library* (www.nces.ed.gov) provides other information; access to NAEP reports, sample assessment passages, items, scoring rubrics with student-constructed responses; and data sources for more in-depth analysis of student achievement results or of the assessments themselves.

Reporting State NAEP Results

As discussed above, states receiving Title I funding must participate in the NAEP Reading Assessment at grades 4 and 8. Results are reported in the aggregate for participating students and are also disaggregated for specific reference groups of students. Individual state reports are generated in addition to reports that contrast results from participating states and from the nation as a whole. The *NAEP Report Generator,* mentioned above, allows state and local administrators and others to customize reports and to investigate specific aspects of student reading achievement.

Reporting Trend Data

According to NAEP law and NAGB policy, long-term trend assessments are conducted as part of NAEP to continue the national trend reports, which, in reading, have been administered since 1971. The long-term trend reports provide the only continuous measures of student achievement over such extended periods of time. Passages and accompanying test items administered as part of the long-term trend assessments have remained unchanged from their initial administration in 1971.

The 2009 NAEP Reading Framework represents several important changes from the framework that has guided the assessment since 1992 (see Exhibit 1 in Chapter 1). These changes are significant enough that the reading trend line from the 1992 assessment will be broken; a new trend line will be instituted to reflect student achievement in reading throughout the use of the 2009 Framework. Assessments aligned to the 1992 Framework and its subsequent versions will have yielded seven years of trend data, as shown in the following table:

Year	Grades for National Administration	Grades for State Administration
1992	4, 8, 12	4
1994	4, 8, 12	4
1998	4, 8, 12	4, 8
2000	4	
2003	4, 8, 12	4, 8
2005	4, 8, 12	4, 8
2007	4, 8	4, 8

Background Variables

Students participating in the NAEP assessments respond to background questionnaires that gather information on variables that are important to understanding reading achievement nationwide. Teachers and school administrators also complete background questionnaires to gather relevant data. To the extent possible, information is also gathered from non-NAEP sources, such as state, district, or school records, to minimize the burden on those who are asked to complete the questionnaires. Questions are nonintrusive; free from bias; and secular, neutral, and nonideological. The questions do not elicit personal feelings, values, or attitudes.

As stated in NAGB policy, background data on students, teachers, and schools are needed to fulfill the statutory requirement that NAEP include information, whenever feasible, disaggregated by race or ethnicity, socioeconomic status, gender, disability, and limited English proficiency. Background information serves the additional purpose of enriching the reporting of NAEP results by examining factors related to academic achievement in the specific subjects that are assessed.

To satisfy the goal of enriching reports on student achievement in reading, background variables are selected to be of topical interest, to be timely, and to be directly related to academic achievement. The selection of variables about which questions will be developed may reflect current trends in the field, such as the use of technology in reading instruction or the extent to which students use the Internet as a reference tool. Recommendations on background variables for the 2009 assessment will be presented as a separate document.

APPENDIX A

SPECIAL STUDIES: 2009 NAEP READING FRAMEWORK

SPECIAL STUDIES

2009 NAEP READING FRAMEWORK

Three special studies have been proposed as part of the development of the 2009 NAEP Reading Framework. Although very different in topic, they have the common goals of improving the quality of the NAEP assessment and gaining maximum information about student achievement in reading. One of the special studies—meaning vocabulary —if conducted prior to the administration of the 2009 assessment, can inform test development by providing information about new item types. Other studies propose the use of data gained from the 2009 NAEP Reading Assessment to examine English learners' reading achievement as well as factors that have an impact on the gender gap. Further details about the special studies, including methodology, will appear in the 2009 NAEP Reading Assessment Specifications document. The special studies are presented in priority order, from highest to lowest.

DEVELOPMENTAL STUDY: MEANING VOCABULARY ASSESSMENT

Purpose

Looking toward the addition of meaning vocabulary items to the 2009 NAEP Reading Assessment, this developmental study will evaluate the reliability and the construct, content, criterion, and concurrent validity of the proposed method of measuring meaning vocabulary. The study will be conducted well in advance of the 2009 administration, to inform the development and use of meaning vocabulary items on NAEP.

Rationale

Although NAEP has included a few vocabulary test items in the context of passages on past assessments, the number of items was scant and there were no specific vocabulary criteria for selecting the items or distractors. Further, past reports from NAEP provided little information on how students performed on the vocabulary items and whether that performance was associated with comprehension achievement levels; thus, these reports did not provide a foundation for emphasizing the importance of vocabulary to reading comprehension. The importance of vocabulary in reading comprehension, as supported by research, will be much more widely understood and disseminated with

- NAEP's initiative specifying vocabulary as a major component of reading comprehension;
- NAEP reports providing quantitative data about the performance of 4th, 8th, and 12th grade students on meaning vocabulary questions and the developmental differences among grades; and
- NAEP reports describing the differences between Advanced, Proficient, Basic, and Below Basic readers on vocabulary, and the implications of these differences.

Recognizing a growing body of research that supports the argument that vocabulary is crucial to reading comprehension, the 2009 NAEP Reading Assessment will include a measure of vocabulary. All vocabulary items will function both as a measure of comprehension of the passage in which the word is included and as a test of readers' specific knowledge of the word's meaning as intended by the passage author. NAEP will include a sufficient number of items to provide reliable and valid data for analysis and interpretation. A description of the criteria for word selection and number of items appear in Chapter 2 of the 2009 NAEP Reading Framework and will be elaborated in the Specifications document to be developed after approval of the Framework.

Research Questions

1. Does student performance differ on multiple-choice and constructed-response vocabulary items?

2. What is the correlation between reading comprehension and meaning vocabulary items, and how does the addition of meaning vocabulary items affect overall scores on the NAEP Reading Assessment?

3. How does the introduction of meaning vocabulary items affect the scores of ethnically, socioeconomically, and geographically varying groups and low-, average-, and high-performing readers?

4. What is the correlation between scores on the meaning vocabulary items and a vocabulary test such as the Peabody Picture Vocabulary Test, 3rd Edition (PPVT-III)? Answers to this question will address the concurrent validity of NAEP's vocabulary measure.

SPECIAL STUDY: ENGLISH LANGUAGE LEARNERS

Purpose

This special study will examine the patterns of achievement among English language learner (ELL) students and the link between NAEP scores and other indicators of students' ability and achievement, as well as the effects of the accommodations afforded students in these groups.

Rationale

In today's schools, the number of English language learners (ELLs) is on the rise. This population trend has implications for reading instruction and assessment as educators seek better ways to teach and evaluate their ELL students—clearly, we require more information about language and its relationship to reading comprehension and meaning vocabulary, a link indicated by past studies.

Although past NAEP reports have provided scores by ethnicity, they have not provided information about the link between language minority students and reading ability. This special study

seeks to examine this link, informing the discussion of how to develop a dynamic assessment (adaptive testing) that more accurately maps the achievement of U.S. students.[57]

Research Questions

1. What miscues occur most frequently among different groups of English language learners, and are these miscues consistent with different groups of English learners' speech?

2. Are tests of English language proficiency predictive of NAEP comprehension and vocabulary scores?

3. What are the differential effects of English proficiency level on NAEP reading and vocabulary?

4. How are reclassified fluent English proficient students (RFEP) achieving in comparison to other groups in reading comprehension and vocabulary, and how do they progress after one, two, or three years of reclassification?

5. At what minimum level of English proficiency is a student able to handle an English test?

6. Do accommodations given to ELL students give access to or change the construct of the test?

SPECIAL STUDY: GENDER DIFFERENCES

Purpose

This special study examines the differences in reading achievement between boys and girls, focusing on factors that are associated with the gender gap in reading.

Rationale

The gender gap—a significant difference between the performance or achievement of boys versus girls—exists in a number of education-related settings and situations. Girls generally have higher high school graduation rates, college admission rates, and enrollment in Advanced Placement courses in the humanities, whereas boys have a higher incidence of diagnosed reading disorders. Although boys generally have higher mathematics and science achievement, the gender gap in the language arts favors girls. Results from the 2002 NAEP Reading Assessment indicate the following:

- The score gap between male and female grade 4 students in 2002 was smaller than in 2000, but it was not found to be significantly different from that in 1992.

[57]The English language learner special study may be informed by the results of the National Literacy Panel's study on language minority children and youth. The NLP is conducting a comprehensive review of research on the development of literacy among language minority children and youth, to be completed in 2004.

- The score gap between boys and girls at grade 8 was smaller in 2002 than in all prior assessment years.

- The score gap between grade 12 boys and girls in 2002 is greater than it was in 1992.

- Girls outperformed boys at all three grades in 2002.

As educators continue to grapple with the gender gap's implications for instruction and assessment, this special study will examine variables in NAEP's assessment design and their relationship to the gender gap in reading. This study will look specifically at the NAEP assessment design and at achievement data gathered from the 2009 administration of the assessment.

Research Questions

1. How are question response modes (e.g., multiple choice, constructed response) related to reading achievement?

2. How are the types of texts (e.g., narrative, information, poetry) related to reading achievement?

3. How is the content of the selection (e.g., gender of main character, different themes, presence of moral) related to reading achievement?

APPENDIX B

SAMPLE PASSAGES AND ITEMS

NOTE: The final Framework will contain sample passages and items for all grades, various text types, and cognitive targets.

SAMPLE VOCABULARY ITEMS

Sample items will be included in the final version of the 2009 NAEP Reading Framework and in the accompanying specifications for the assessment.

This draft version illustrates the approach to vocabulary assessment recommended in the Framework by presenting the following:

1. A listing of words that were identified as likely candidates for item development from a released NAEP passage, *Dorothea Dix: Quiet Crusader*
2. Sample constructed-response items
3. Sample multiple-choice items
4. The passage about which items were developed

Candidate Words for Item Development

- She had such a tremendous **impact** on nineteenth century America.
- … a **neglectful** father
- … angry at this **neglect** on the part of the authorities
- … and a mother who had trouble **coping** with daily activities
- … her grandmother, a cold, **inflexible** woman
- … taught her the **organizational** skills to help her do [her duty].
- The memorial caused an **uproar**
- Gradually, the personal attacks **abated**, primarily because Dix's research had been so thorough
- … she knew what kind of opposition to expect, and she could help **deflect** it
- She also left a **legacy** of concern

Sample Constructed-Response Item to Assess Vocabulary

The text says that Dorothea had a tremendous **impact** on nineteenth-century America. **Impact** can mean *effect* or *influence* or it can mean *two things hitting each other*. Tell which meaning **impact** has in this passage and tell how you know this is the meaning.

Sample Multiple-Choice Items

The text says that personal attacks on Dorothea **abated**. The word **abated** means that

a. the attacks became violent.

*b. there were fewer attacks.

c. people said rude things about her.

d. the police began to protect her.

The text says that when Dorothea knew what kind of opposition to expect, she could **deflect** it. The word **deflect** means that Dorothea could

a. avoid people who did not agree with her.

*b. create arguments to convince people to help her.

c. write articles that all people could read.

d. be very polite to people who argued with her.

The text says that Dorothea Dix left a **legacy of concern**. What does the phrase **legacy of concern** mean in the passage?

*a. Dorothea was able to get people very concerned about solving a problem.

b. Dorothea left many important problems unsolved when she died.

c. Dorothea left ways of thinking about the issues that concerned her.

d. Dorothea set examples of ways for people to help each other.

DOROTHEA DIX: QUIET CRUSADER
BY LUCIE GERMER

Dorothea Dix was so shy and quiet that it is hard to believe she had such a tremendous **impact** on nineteenth-century America. Yet almost single-handedly, she transformed the way people with mental illness were treated.

Dorothea was born in Maine in 1802 to a **neglectful** father and a mother who had trouble **coping** with daily activities. She ran away at the age of twelve to live with her grandmother, a cold, **inflexible** woman who nevertheless taught her the importance of doing her duty, as well as the **organizational** skills to help her do it.

Dorothea grew into an attractive woman, with blue-gray eyes, wavy brown hair, and a rich, low speaking voice. As a young adult, she spent her time teaching, writing books for children, and fighting the effects of tuberculosis. Despite her poor health, by age thirty-nine, she had saved enough money so that she had no financial worries. Afraid that her health was too poor for her to continue teaching, she looked forward to a lonely, unfulfilling life.

Then a friend suggested that she teach a Sunday school class for women in a Massachusetts jail. It would be useful without overtaxing her. On her first day, she discovered that among the inmates were several mentally ill women. They were anxious to hear what she had to say, but she found it impossible to teach them because the room was unheated. Dix, angry at this **neglect** on the part of the authorities, asked noted humanitarian Samuel Howe for his help in taking the case to court. The court ordered the authorities to install a wood stove.

This sparked Dix's interest in the ways mentally ill people were treated. Encouraged by Howe and education reformer Horace Mann, she spent two years visiting every asylum, almshouse, and jail in Massachusetts, quietly taking notes on the conditions. Her grandmother had trained her to be thorough. and the training paid off.

Dix put her findings into a memorial (a report) that Howe presented to the Massachusetts legislature: "I tell what I have seen. . . . [I]nsane persons confined . . . in cages, closets, cellars, stalls, pens; chained, naked, beaten with rods and lashed into obedience."

The memorial caused an **uproar**: What kind of woman would be interested in such a subject and insist on discussing it in public? Gradually, the personal attacks **abated**, primarily because Dix's research had been so thorough and her results were so complete that no one could argue with them. Howe was able to push a bill through the Massachusetts legislature to enlarge the state asylum.

Dix spent the next few years systematically studying conditions and getting legislation passed in other states. Her health did not keep her from putting in long hours of hard work and travel. First, she studied the psychological and legal views of mental illness and its treatment. Before she went into a state, she examined local laws and previous proposals for change. Then she visited every institution, small or large, and met with administrators, politicians, and private citizens. She put all this information together in a memorial that was presented to the legislature. She also wrote newspaper articles to inform the public of her findings. By this time, she knew what kind of

opposition to expect, and she could help **deflect** it by appealing to the citizens' sense of pride or desire for economy. She also met privately with small groups of politicians to answer their questions and try to persuade them to come around to her point of view. She was usually successful, and public institutions to house and treat people with mental illness were established.

Unfortunately, that success did not carry over to her next goal: national legislation to improve the living conditions for people with mental illness. In the l850s, Congress passed a bill setting aside land for the establishment of national hospitals for those with mental illness, but President Franklin Pierce vetoed the bill on constitutional grounds.

Dix was shattered. Her health, which had been surprisingly good during her struggles, took a turn for the worse, and doctors recommended she take a long voyage. Dix was unable to relax, however, and her vacation turned into a marathon journey through Europe, as she examined the living conditions of mentally ill people in each place she visited. She spoke with doctors, government officials, and even the pope, pleading for humanitarian treatment for those who were mentally ill. She went as far east as Constantinople (now Istanbul) in Turkey and as far north as St. Petersburg (now Leningrad) in Russia. She was greeted respectfully everywhere she went, and many of her recommendations were followed.

She returned to the United States in 1857 and was appointed superintendent of women nurses during the Civil War. Dix was the only woman to hold an official position in the U.S. government during the war.

After the war, Dix continued her work on behalf of mentally ill people both in the United States and abroad. She died in 1887 at the age of eighty-five. Between 1841, when she began her crusade, and the year she died, thirty-two new hospitals for those who were mentally ill were built, most of them directly because she had brought the problem to the attention of people in power. Several other institutions in Canada and Europe, and even two in Japan, were established because of her influence. She also left a **legacy of concern**: No longer was mental illness treated as a crime, and her enlightened and tireless work led to more humane living conditions for people with mental illness.

APPENDIX C

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APPENDIX D

NAEP READING PROJECT STAFF

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NAEP READING PROJECT STAFF
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